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FILE 'HCAPLUS' ENTERED AT 11:04:03 ON 07 OCT 2003

L1 274531 SEA ABB=ON (?DEVICE? OR ?CLOSURE? OR ?RECEPTACLE? OR ?CONTAIN?  
 ) AND (?COLLECT? OR ?RECOVER? OR ?AMASS?)  
L2 4651 SEA ABB=ON L1 AND (?SEAL? OR ?PREVENT?(W)?LEAK?)  
L3 4651 SEA ABB=ON L1 AND (?SEAL? OR ?PREVENT?(W)?LEAK?)  
L4 1 SEA ABB=ON L3 AND ?HOLES?(4A)?VENT? *1 hit from CA Plus - ventilated container*  
L5 2 SEA ABB=ON L3 AND (?COLOR? OR ?OPAQUE) (3A)?COAT? AND (?PEEL?  
 OR ?REMOV?)  
L6 3 SEA ABB=ON L3 AND (?COLOR? OR ?OPAQUE?) (3A)?COAT? AND  
 (?CHANGE? OR ?MODIF? OR ?ALTER?)  
L7 4 SEA ABB=ON L5 OR L6 *4 hits from CA Plus - removable color coating*

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, COMPENDEX'  
ENTERED AT 14:30:13 ON 07 OCT 2003

L8 30 SEA ABB=ON L4  
L9 30 DUP REMOV L8 (0 DUPLICATES REMOVED) *30 hits from other db's - ventilated container*  
L10 7 SEA ABB=ON L7  
L11 7 DUP REMOV L10 (0 DUPLICATES REMOVED) *7 hits " " " - removable color coating*

=&gt; d ibib abs ind 14 1-2

L4 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2003:312633 HCAPLUS  
DOCUMENT NUMBER: 138:317141  
TITLE: Rapid diagnostic method for distinguishing allergies  
and infections and nasal secretion collection unit  
INVENTOR(S): Small, Parker; Huang, Shih-Wen;  
Kudla, Ronald  
PATENT ASSIGNEE(S): University of Florida, USA  
SOURCE: U.S., 15 pp., Cont.-in-part of Appl. No.  
PCT/US99/05751.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6551791	B1	20030422	US 2000-597360	20000619
US 5910421	A	19990608	US 1996-621557	19960325
WO 2000055359	A1	20000921	WO 1999-US5751	19990316
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9933558	A1	20001004	AU 1999-33558	19990316
EP 1161559	A1	20011212	EP 1999-914920	19990316
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2002538834	T2	20021119	JP 2000-605775	19990316
WO 2001098783	A2	20011227	WO 2001-US16216	20010518
WO 2001098783	A3	20020404		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1295128	A2	20030326	EP 2001-939150	20010518
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
US 2002081575	A1	20020627	US 2001-15525	20011213
US 2002086286	A1	20020704	US 2001-15509	20011213
US 2002086287	A1	20020704	US 2001-15521	20011213
US 2002137117	A1	20020926	US 2001-15520	20011213
PRIORITY APPLN. INFO.:			US 1995-576604	B2 19951221
			US 1996-621557	A2 19960325
			WO 1999-US5751	A2 19990316
			US 2000-597360	A 20000619
			WO 2001-US16216	W 20010518

US 2002-936954 A2 20020124

AB A method and device for rapidly, non-invasively and inexpensively differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis, comprising a support strip upon which is fixed discrete indicators of pH, protein content, nitrite content, leukocyte esterase activity, and eosinophil content or other measure of a substance found in allergic secretions, such as TAME esterase, of a sample with which said reagent test strip is contacted. Contact of a nasal secretion with the device of this invention permits differentiation between allergic, bacterial and viral conditions, based on pH, protein content, leukocyte esterase activity, nitrite content, eosinophil content and TAME esterase activity. The invention further provides a novel means for collecting nasal secretions to facilitate differential diagnosis of sinusitis, upper respiratory tract viral infection and allergic rhinitis.

IC ICM C12Q001-44

NCL 435019000; 435034000; 436811000

CC 9-16 (Biochemical Methods)

ST Section cross-reference(s): 7, 14, 15

ST diagnostic distinguishing allergy infection nasal secretion collection

IT Nose  
(Secretion; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Analytical apparatus  
(Unitary reagent test strip; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Nose, disease  
(allergic rhinitis; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Acid-base indicators  
Allergy  
Bacteria (Eubacteria)  
Body fluid  
Collecting apparatus  
Concentration (condition)  
Containers  
Diagnosis  
Eosinophil  
Human  
Infection  
Sealing  
Virus  
pH  
(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Proteins  
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Reagents  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Respiratory tract, disease  
(sinusitis, Bacteria; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Respiratory tract  
(upper, viral infection; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Infection

(viral; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT 9013-79-0, Esterase

RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(leukocyte activity; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT 9016-18-6, TAME esterase 14797-65-0, Nitrite, analysis

RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:935886 HCAPLUS

DOCUMENT NUMBER: 136:66584

TITLE: Rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit

INVENTOR(S): Kudla, Ronald; Small, Parker; Huang, Shih-Wen

PATENT ASSIGNEE(S): University of Florida, USA

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001098783	A2	20011227	WO 2001-US16216	20010518
WO 2001098783	A3	20020404		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6551791	B1	20030422	US 2000-597360	20000619
EP 1295128	A2	20030326	EP 2001-939150	20010518
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

PRIORITY APPLN. INFO.:

US 2000-597360	A	20000619
US 1995-576604	B2	19951221
US 1996-621557	A2	19960325
WO 1999-US5751	A2	19990316
WO 2001-US16216	W	20010518

AB A method and device for rapidly, non-invasively and inexpensively differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis, comprises a support strip upon which is fixed discrete indicators of pH, protein content, nitrite content, leukocyte esterase activity, and eosinophil content or other measure of a substance found in allergic secretions, such as TAME esterase, of a sample with which said reagent test strip is contacted. Contact of a nasal secretion with the device of this invention permits differentiation

between allergic, bacterial and viral conditions, based on pH, protein content, leukocyte esterase activity, nitrite content, eosinophil content and TAME esterase activity. The invention further provides a novel means for collecting nasal secretions to facilitate differential diagnosis of sinusitis, upper respiratory tract viral infection and allergic rhinitis.

IC ICM G01N033-53

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 7, 14, 15

ST diagnosis allergy infection nasal secretion collection app; allergic rhinitis diagnosis nasal secretion; upper respiratory tract viral infection diagnosis; bacterial sinusitis diagnosis nasal secretion; esterase TAME allergic rhinitis infection diagnosis

IT Proteins

RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(ECP (eosinophil cationic protein); rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Cytokines

RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(EDN (eosinophil-derived neurotoxin); rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Cytokines

RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(MBP (major basic protein); rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Nose, disease

(allergic rhinitis; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Infection

(bacterial, sinusitis; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Antigens

Enzymes, analysis

RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(eosinophil-specific; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Leukocyte

(esterase; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Proteins

RL: ARG (Analytical reagent use); DEV (Device component use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(immobilized, specific for eosinophil; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Antibodies

RL: ARG (Analytical reagent use); DEV (Device component use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(immobilized; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Nose

(infection; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Antibodies  
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(labeled; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Acid-base indicators  
Allergy  
Collecting apparatus  
Color formers  
Diagnosis  
Eosinophil  
Supported reagents  
Test kits  
pH  
(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Proteins  
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Reagents  
RL: ARG (Analytical reagent use); DEV (Device component use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Antibodies  
Avidins  
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Nose, disease  
(rhinitis; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Diazonium compounds  
RL: ARG (Analytical reagent use); DEV (Device component use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(salts, in leukocyte indicator; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Containers  
(sealable; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Nose  
(secretions; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Respiratory tract, disease  
(sinusitis; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Analytical apparatus  
(unitary reagent test strip; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Respiratory tract, disease  
(upper, infection; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

IT Infection  
(viral, of upper respiratory tract; rapid diagnostic method for

- distinguishing allergies and infections and nasal secretion collection unit)
- IT 9016-18-6, TAME esterase  
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(TAME esterase; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)
- IT 9013-79-0, Esterase  
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(activity of leukocyte; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)
- IT 109-97-7D, Pyrrole, derivs., amino acid esters  
RL: ARG (Analytical reagent use); DEV (Device component use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(in leukocyte indicator; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)
- IT 98-50-0, p-Arsanilic acid 5423-67-6  
RL: ARG (Analytical reagent use); DEV (Device component use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(in nitrite indicator; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)
- IT 76-59-5, Bromthymol blue 493-52-7, Methyl red  
RL: ARG (Analytical reagent use); DEV (Device component use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(in pH indicator; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)
- IT 4430-25-5, Tetrabromphenol blue  
RL: ARG (Analytical reagent use); DEV (Device component use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(in protein indicator; rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)
- IT 9003-99-0, Eosinophil peroxidase 14797-65-0, Nitrite, analysis  
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)
- IT 58-85-5, Biotin 58-85-5D, Biotin, labeled 100-01-6, biological studies  
901-47-3, TAME 29542-03-8 244299-51-2 384378-29-4  
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(rapid diagnostic method for distinguishing allergies and infections and nasal secretion collection unit)

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L1 274531 SEA FILE=HCAPLUS ABB=ON (?DEVICE? OR ?CLOSURE? OR ?RECEPTACLE?  
OR ?CONTAIN?) AND (?COLLECT? OR ?RECOVER? OR ?AMASS?)

L3 4651 SEA FILE=HCAPLUS ABB=ON L1 AND (?SEAL? OR ?PREVENT?(W)?LEAK?)

L4 1 SEA FILE=HCAPLUS ABB=ON L3 AND ?HOLES?(4A)?VENT?

=&gt; d ibib abs 14 1-1

L4 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1967:432894 HCAPLUS

DOCUMENT NUMBER: 67:32894

TITLE: Cholecalciferol

INVENTOR(S): Salwa, Henryk; Jaworska, Romana; Bury, Zofia;  
Lewenstein, Wieslaw; Vaedtke, Jacek; Czarnocka, Anna;  
Jedrzejuk, Janina

PATENT ASSIGNEE(S): Instytut Farmaceutyczny

SOURCE: Pol., 2 pp.

CODEN: POXXA7

DOCUMENT TYPE: Patent

LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 50925		19660222	PL	19641219

AB Sepn. of cholecalciferol (I) from a reaction mixt. obtained during uv irradiation of 7-**dehydrocholesterol** (II) in org. **solvent** is described. I was sepd. from the mixt. as a complex with II. Thus, 14.4 g. II in C6H6 was irradiated with uv light, the soln. concd. in vacuo, 100 ml. MeOH added, and the mixt. shaken several min. The not solubilized II was filtered off, washed with 50 ml. MeOH, and dried (10.4 g.). The filtrate was satd. with N in a tightly **sealed** vessel and kept at 36.degree. 72 hrs. The soln. obtained **contg.** (1.6 g.) I and (0.47 g.) II, was mixed with 0.45 g. II, the mixt. was heated until II dissolved, and the mixt. concd. under reduced pressure to 30 ml., and the mixt. **contg.** the complex compd. was kept in an ice box overnight to yield 3 g. cryst. substance **contg.** 45% I. The substance was dissolved in 70 ml. C6H6 and the soln. passed through a column 20 mm. in diam. **contg.** 80 g. Al2O3 having III degree of activity by Brockman. When the soln. left the column, the column eluted with benzene and 150 ml. of eluate were discarded. Then, 210 ml. eluate, **contg.** 1.25 g. I, and the other 180 ml. **contg.** 60 mg. I and 30 mg. II were **collected**. The column was then eluted with C6H6 **contg.** 10% EtOH and the third fraction was obtained **contg.** 1.4 g. II. The first fraction was evapd. in vacuo and the residue crystd. with an addn. of acetone and H2O to give 1.05 g. I m. 83-5.degree.. The 2nd fraction was combined with the residue after first crystn., the mixt. was evapd. until a dry residue was obtained. The residue was dissolved in MeOH, 0.2 g. II added to give 0.4 g. of a complex of I with II. The third fraction was evapd., the residue was shaken with MeOH to give 1.3 g. II.



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L1 274531 SEA FILE=HCAPLUS ABB=ON (?DEVICE? OR ?CLOSURE? OR ?RECEPTACLE?  
OR ?CONTAIN?) AND (?COLLECT? OR ?RECOVER? OR ?AMASS?)  
L3 4651 SEA FILE=HCAPLUS ABB=ON L1 AND (?SEAL? OR ?PREVENT?(W)?LEAK?)  
L4 1 SEA FILE=HCAPLUS ABB=ON L3 AND ?HOLES?(4A)?VENT?  
L8 30 SEA L4

=> d ibib abs 18 1-30

L8 ANSWER 1 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2003-352039 [33] WPIDS  
DOC. NO. NON-CPI: N2003-281159  
DOC. NO. CPI: C2003-092625  
TITLE: Exhaust recycle system comprises nitrogen supply  
**device**, condensation recycle **device**,  
flow control **device**, heating **device**,  
recycle storage **device**, solvent desorption  
**device**, drying **device** and PLC control  
**device**.  
DERWENT CLASS: J01 T06  
INVENTOR(S): JANG, C  
PATENT ASSIGNEE(S): (SANF-N) SAN FU CHEM CO LTD  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
TW 494010	A	20020711	(200333)*		

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
TW 494010	A	TW 2000-106379	20000407

PRIORITY APPLN. INFO: TW 2000-106379 20000407

AN 2003-352039 [33] WPIDS

AB TW 494010 A UPAB: 20030526

NOVELTY - An exhaust recycle system is used to recycle solvent **contained** in an exhaust to purify the exhaust. The system comprises a nitrogen supply **device**; a condensation recycle **device**; a flow control **device**; a heating **device**; a recycle storage **device**; a solvent desorption **device**; a drying **device**; and a PLC control **device**. An exhaust **containing** solvent to be treated is fed into the system by a fan. After drying, the exhaust is fed to an absorption desorption tank of the desorption **device** for absorbing the solvent therein by an absorption medium, and then the purified gas is discharged. The nitrogen supply **device** supplies nitrogen as a solvent desorption medium. Via a **sealed** pipeline, the desorbed solvent flows through the heating **device** for heating, then to the absorption desorption tank for separating the solvent from the absorption medium and mixing with the gaseous nitrogen and returning to the condensation recycle **device** so that the solvent mixture gas is condensed by the condensation recycle **device** into a solution to be **collected** in the recycle storage **device**. The nitrogen is subjected to cooling, reflowing and heating before being reused as a desorption medium. The released purified gas is discharged to the

atmosphere through **vent holes**, thereby effectively  
reducing pollution and forming an exhaust recycle system.  
Dwg.1/1

L8 ANSWER 2 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2002-642240 [69] WPIDS  
CROSS REFERENCE: 1999-356818 [30]; 2002-114599 [15]; 2002-642155 [69];  
2002-642239 [69]  
DOC. NO. CPI: C2002-181380  
TITLE: Differentiating between allergic rhinitis (AR), upper  
respiratory tract viral infection (URI), bacterial  
sinusitis (BS), based on pH, protein, levels of nitrite,  
leukocyte esterase, TAME esterase, eosinophil count in  
nasal secretion.  
DERWENT CLASS: B04 D16  
INVENTOR(S): HUANG, S; KUDLA, R; SMALL, P  
PATENT ASSIGNEE(S): (HUAN-I) HUANG S; (KUDL-I) KUDLA R; (SMAL-I) SMALL P  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002086287	A1	20020704	(200269)*		17

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002086287	A1	CIP of	US 1995-576604 19951221
		CIP of	US 1996-621557 19960325
		CIP of	WO 1999-US5751 19990316
		Div ex	US 2000-597360 20000619
			US 2001-15521 20011213
		CIP of	US 2002-936954 20020124

PRIORITY APPLN. INFO: US 2002-936954 20020124; US 1995-576604  
19951221; US 1996-621557 19960325; WO  
1999-US5751 19990316; US 2000-597360  
20000619; US 2001-15521 20011213

AN 2002-642240 [69] WPIDS  
CR 1999-356818 [30]; 2002-114599 [15]; 2002-642155 [69]; 2002-642239 [69]  
AB US2002086287 A UPAB: 20021026

NOVELTY - Differentiating (M1) AR, URI and BS, by depositing patient's  
nasal secretion into **collection** apparatus for contact with  
reagents indicating pH, protein, nitrite, leukocyte esterase (LE),  
eosinophil or TAME esterase (TE) concentrations; differentiating AR, URI,  
BS based on pH, protein content, nitrite concentration, LE or TE activity  
or eosinophil counts, is new.

DETAILED DESCRIPTION - (M1) comprises measuring a sample of patient's  
nasal secretion for pH, protein concentration, nitrite concentration,  
leukocyte esterase activity, and eosinophil counts or TAME esterase  
activity or both, such that a scoring system is developed through a  
combination of:

(a) a pH between about 7.5 and 9, a moderately strong presence of  
protein, nitrite or leukocyte esterase, and low or absent eosinophil  
counts or TAME esterase activity is indicative of bacterial sinusitis  
without an allergic condition; and

(b) a pH between about 5 and 7, little or no protein, little or no  
nitrite, little or no leukocyte esterase activity, and moderate to

significant TAME esterase activity or moderate to high eosinophil counts is indicative of allergic rhinitis, and a pH between about 5 and 7, little or no protein, low concentration or a trace of nitrite or a trace of leukocyte esterase or both, and low or absent eosinophil counts or low or absent TAME esterase activity indicates an upper respiratory tract infection, where the method comprises deposition by a patient of a nasal secretion sample within a **collection** apparatus adapted for receipt of the sample for concurrent or subsequent contact with reagents indicative of the pH, protein, nitrite, leukocyte esterase, eosinophil or TAME esterase concentrations.

INDEPENDENT CLAIMS are also included for:

(1) a **device** (I) for differentiating between AR, URI, and BS comprises a support upon which is fixed discrete indicator of pH, protein content, nitrite content, leukocyte esterase activity, and eosinophil content or TAME esterase or both, of a sample with which the fixed discrete indicators are contacted, where the support further comprises a unit for **collecting** the nasal secretion while minimizing contact of the nasal secretion with personnel using the **collection device**;

(2) a **device** (a nasal secretion **collection device**) (II) for **collecting** nasal secretions comprising a **sealable container** into which a patient may blow their nose, or into which a child's nose may be wiped or squeezed to obtain nasal secretion, where the **container** comprises a series of holes disposed so as to permit air blown into the **container** to escape, without at the same time permitting the nasal secretion to escape; and

(3) a kit for differential diagnosis of BS, AR and URI, comprises an unit for **collecting** a patient's nasal secretions within a **container**; and an unit for providing a differential readout upon contact with the nasal secretion, depending on whether the patient is afflicted with BS, URI or AR.

USE - (M1) is useful for differentiating between allergic rhinitis, upper respiratory tract viral infection, and bacterial sinusitis. (I) is useful for differential diagnosis of BS, AR and URI which involves **collecting** of patient's nasal secretion within a **container** and contacting the nasal secretions in the **container** with reagents that provide differential readout depending on whether the patient is afflicted with BS, URI or AR. Preferably AR is confirmed by means of contacting the nasal secretions with a reagent that provides a detective signal if TE or eosinophils are present in the secretion (claimed).

ADVANTAGE - (M1) can be carried out rapidly, is non-invasive and economical. (M1) has the potential to supplant much more expensive and invasive clinical procedures. (I) provides safe and simple differential diagnosis between BS, URI and AR. (II) provides a practical, simple and safe **collection device** for **collection** of nasal secretion. The **collection device** is adapted for home or point of use care for the **collection** of nasal secretions and for the conducting diagnosis without the need for end-user contact with nasal secretion samples.

Dwg.0/3

L8 ANSWER 3 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2002-642239 [69] WPIDS  
CROSS REFERENCE: 1999-356818 [30]; 2002-114599 [15]; 2002-642155 [69];  
2002-642240 [69]  
DOC. NO. CPI: C2002-181379  
TITLE: Differentiating between allergic rhinitis (AR), upper  
respiratory tract viral infection (URI), bacterial

sinusitis (BS), based on pH, protein, nitrite levels, leukocyte esterase (LE), TAME esterase (TE), eosinophil count in nasal secretion.

DERWENT CLASS: B04 D16  
 INVENTOR(S): HUANG, S; KUDLA, R; SMALL, P  
 PATENT ASSIGNEE(S): (HUA-I) HUANG S; (KUDL-I) KUDLA R; (SMAL-I) SMALL P  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002086286	A1	20020704	(200269)*		17

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002086286	A1	CIP of	US 1995-576604 19951221
		CIP of	US 1996-621557 19960325
		CIP of	WO 1999-US5751 19990316
		Div ex	US 2000-597360 20000619
			US 2001-15509 20011213
		CIP of	US 2002-936954 20020124

PRIORITY APPLN. INFO: US 2002-936954 20020124; US 1995-576604 19951221; US 1996-621557 19960325; WO 1999-US5751 19990316; US 2000-597360 20000619; US 2001-15509 20011213

AN 2002-642239 [69] WPIDS  
 CR 1999-356818 [30]; 2002-114599 [15]; 2002-642155 [69]; 2002-642240 [69]  
 AB US2002086286 A UPAB: 20021026

NOVELTY - Differentiating (M1) AR, URI and BS comprising depositing patient's nasal secretion into **collection** apparatus for contact with reagents indicating pH, protein, nitrite, LE, eosinophil or TE concentrations; differentiating AR, URI, BS based on pH, protein content, nitrite concentration, LE or TE activity or eosinophil counts, is new.

DETAILED DESCRIPTION - Differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis, which comprises measuring a sample of patient's nasal secretion for pH, protein concentration, nitrite concentration, leukocyte esterase activity, and eosinophil counts or TAME esterase activity or both, such that a scoring system is developed through a combination of:

(a) a pH between about 7.5 and 9, a moderately strong presence of protein, nitrite or leukocyte esterase, and low or absent eosinophil counts or TAME esterase activity is indicative of bacterial sinusitis without an allergic condition; and

(b) a pH between about 5 and 7, little or no protein, little or no nitrite, little or no leukocyte esterase activity, and moderate to significant TAME esterase activity or moderate to high eosinophil counts is indicative of allergic rhinitis, and a pH between about 5 and 7, little or no protein, low concentration or a trace of nitrite or a trace of leukocyte esterase or both, and low or absent eosinophil counts or low or absent TAME esterase activity indicates an upper respiratory tract infection, where the method comprises deposition by a patient of a nasal secretion sample within a **collection** apparatus adapted for receipt of the sample for concurrent or subsequent contact with reagents indicative of the pH, protein, nitrite, leukocyte esterase, eosinophil or TAME esterase concentrations.

INDEPENDENT CLAIMS are also included for:

(1) a **device** (I) for differentiating between AR, URI, and BS comprises a support upon which is fixed discrete indicator of pH, protein content, nitrite content, leukocyte esterase activity, and eosinophil content or TAME esterase or both, of a sample with which the fixed discrete indicators are contacted, where the support further comprises a unit for **collecting** the nasal secretion while minimizing contact of the nasal secretion with personnel using the **collection device**;

(2) a **device** (a nasal secretion **collection device**) (II) for **collecting** nasal secretions comprising a **sealable container** into which a patient may blow their nose, or into which a child's nose may be wiped or squeezed to obtain nasal secretion, where the **container** comprises a series of holes disposed so as to permit air blown into the **container** to escape, without at the same time permitting the nasal secretion to escape; and

(3) a kit for differential diagnosis of BS, AR and URI, comprises an unit for **collecting** a patient's nasal secretions within a **container** and an unit for providing a differential readout upon contact with the nasal secretion, depending on whether the patient is afflicted with BS, URI or AR.

USE - For differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis. (I) is useful for differential diagnosis of BS, AR and URI which involves **collecting** of patient's nasal secretion within a **container** and contacting the nasal secretions in the **container** with reagents that provide differential readout depending on whether the patient is afflicted with BS, URI or AR. Preferably AR is confirmed by means of contacting the nasal secretions with a reagent that provides a detective signal if TE or eosinophils are present in the secretion (claimed).

ADVANTAGE - (M1) can be carried out rapidly, is non-invasive and economical. (M1) has the potential to supplant much more expensive and invasive clinical procedures. (I) provides safe and simple differential diagnosis between BS, URI and AR. (II) provides a practical, simple and safe **collection device** for **collection** of nasal secretion. The **collection device** is adapted for home or point of use care for the **collection** of nasal secretions and for the conducting diagnosis without the need for end-user contact with nasal secretion samples.

DESCRIPTION OF DRAWING(S) - The figure shows the different chemical readouts obtained by contacting reagent test strips with the nasal secretions of multiple patients presenting with respiratory discomfort. Dwg.1/3

L8 ANSWER 4 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 2002-642155 [69] WPIDS  
 CROSS REFERENCE: 1999-356818 [30]; 2002-114599 [15]; 2002-642239 [69];  
 2002-642240 [69]  
 DOC. NO. CPI: C2002-181345  
 TITLE: **Device** and method useful for differential diagnosis of allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis comprises measuring a patients nasal secretion for e.g., pH, protein and nitrite concentration.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): HUANG, S; KUDLA, R; SMALL, P  
 PATENT ASSIGNEE(S): (HUAN-I) HUANG S; (KUDL-I) KUDLA R; (SMAL-I) SMALL P  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002081575	A1	20020627	(200269)*		17

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002081575	A1	CIP of	US 1995-576604
		CIP of	US 1996-621557
		CIP of	WO 1999-US5751
		Div ex	US 2000-597360
			US 2001-15525
		CIP of	US 2002-936954

PRIORITY APPLN. INFO: US 2002-936954 20020124; US 1995-576604 19951221; US 1996-621557 19960325; WO 1999-US5751 19990316; US 2000-597360 20000619; US 2001-15525 20011213

AN 2002-642155 [69] WPIDS  
 CR 1999-356818 [30]; 2002-114599 [15]; 2002-642239 [69]; 2002-642240 [69]  
 AB US2002081575 A UPAB: 20021026

NOVELTY - Differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis, comprising measuring a sample of a patient's nasal secretion for pH, protein concentration, nitrite concentration, leukocyte esterase activity, and eosinophil counts or TAME esterase activity or both, and **device** for carrying out said method.

DETAILED DESCRIPTION - Method for differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis, comprising measuring a sample of a patient's nasal secretion for pH, protein concentration, nitrite concentration, leukocyte esterase activity, and eosinophil counts or TAME esterase activity or both, by deposition of a nasal secretion sample by a patient within a **collection** apparatus adapted for receipt of the sample for concurrent or subsequent contact with reagents indicative of the parameters mentioned, where a scoring system is developed through the combination of:

(a) a pH of 7.5-9, a moderately strong presence of protein, nitrite or leukocyte esterase, and low or absent eosinophil counts or TAME esterase activity is indicative of bacterial sinusitis without an allergic condition;

(b) a pH of 5-7, little or no protein, nitrite and leukocyte esterase activity, and moderate to significant TAME esterase activity or moderate to high eosinophil counts is indicative of allergic rhinitis; and

(c) a pH of 5-7, little or no protein, low concentration or a trace of nitrite or a trace of leukocyte esterase or both, and low or absent eosinophil counts or TAME esterase activity indicates an upper respiratory tract viral infection. A **device** for differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis comprises a support with fixed discrete indicators of pH, protein content, nitrite content, leukocyte esterase activity and eosinophil content or TAME esterase or both, of a sample where the fixed discrete indicators are contacted, and a means for **collecting** nasal secretion while minimizing contact of nasal secretion with the person using the **collection device**.

INDEPENDENT CLAIMS are also included for the following:

(1) a **device** for **collecting** nasal secretions comprising a **sealable container** to which patients may

blow their nose, or to which a child's nose may be wiped or squeezed to obtain nasal secretion, where the **container** comprises a series of holes disposed to permit air blown into the **container** to escape without permitting the nasal secretion to escape;

(2) a method for differential diagnosis of bacterial sinusitis, allergic rhinitis and upper respiratory tract infections, comprising: (a) **collecting** a patient's nasal secretions within a **container**; and (b) contacting the nasal secretions in the **container** with reagents which provide differential read-out depending on whether the patient is afflicted with sinusitis, upper respiratory tract viral infection or allergic rhinitis; and

(3) a kit for differential diagnosis of bacterial sinusitis, allergic rhinitis and upper respiratory tract viral infection, comprising: (a) a means for **collecting** a patient's nasal secretions within a **container**; and (b) a means for providing a differential read-out upon contact with the nasal secretion, depending on whether the patient is afflicted with sinusitis, upper respiratory tract viral infection or allergic rhinitis.

USE - The method and **device** is useful for differential diagnosis of allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis in a nasal secretion (claimed).

ADVANTAGE - The invention provides a safe, simple, and self-contained **device** for the differential diagnosis of sinusitis, viral respiratory tract infection and allergic rhinitis. The method provides an inexpensive, non-invasive, and rapid method of distinguishing between allergies and infections.

DESCRIPTION OF DRAWING(S) - The figure depicts a graphic representation of the novel test kit and **collection** apparatus of the novel **device** with the illustration of the method of its use.  
Dwg.1/3

L8 ANSWER 5 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2002-339528 [37] WPIDS  
CROSS REFERENCE: 2002-329670 [36]; 2002-339546 [37]; 2002-382810 [41]  
DOC. NO. NON-CPI: N2002-266992  
DOC. NO. CPI: C2002-097493  
TITLE: Water-soluble **container** for packaging aqueous composition e.g. detergent composition for washing machine, comprises thermoformed poly(vinyl alcohol) film for contacting composition **containing** preset amount of water.  
DERWENT CLASS: A14 A92 D25 Q34  
INVENTOR(S): DUFFIELD, P J; HAMMOND, G R  
PATENT ASSIGNEE(S): (RECK) RECKITT & COLMAN PROD LTD; (RECK) RECKITT BENCKISER UK LTD  
COUNTRY COUNT: 98  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002016222	A1	20020228	(200237)*	EN	32
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
GB 2367828	A	20020417	(200237)		
AU 2001084175	A	20020304	(200247)		
GB 2371552	A	20020731	(200258)		

GB 2367828 B 20021009 (200267)  
 EP 1311440 A1 20030521 (200334) EN  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI TR

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002016222	A1	WO 2001-GB3827	20010823
GB 2367828	A	GB 2000-20965	20000825
AU 2001084175	A	AU 2001-84175	20010823
GB 2371552	A	GB 2001-20481	20010823
GB 2367828	B	GB 2000-20965	20000825
EP 1311440	A1	EP 2001-963142	20010823
		WO 2001-GB3827	20010823

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001084175	A Based on	WO 2002016222
EP 1311440	A1 Based on	WO 2002016222

PRIORITY APPLN. INFO: GB 2000-21113 20000825; GB 2000-20965  
 20000825

AN 2002-339528 [37] WPIDS  
 CR 2002-329670 [36]; 2002-339546 [37]; 2002-382810 [41]  
 AB WO 200216222 A UPAB: 20030529

NOVELTY - A water-soluble **container** comprises a thermoformed poly(vinyl alcohol) (PVOH) film. The **container contains** an aqueous composition **containing** greater than 3 weight% of free water. The aqueous composition contacts the film.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(i) Use of the thermoformed PVOH film for packaging the aqueous composition; and

(ii) A process for producing the **container** which involves thermoforming one PVOH film to produce a pocket, filling the pocket with the aqueous composition, placing another film on top of the filled pocket, and **sealing** both the films together.

USE - For packaging aqueous composition for dish washing, water-softening, laundry or bleaching, detergent composition, a rinse-aid for use in a domestic washing machine (such as a laundry washing machine or a dish washing machine), and aqueous disinfectant, antibacterial, antiseptic compositions, or a refill composition for a trigger-type spray (claimed).

ADVANTAGE - The water soluble **container** is relatively self-supporting and has a more attractive, rounded three-dimensional appearance. The liquid composition having a higher water content can be easily packaged in the **containers**. The **containers** is initially limp, but attains round, attractive 3-dimensional appearance after storing for short while (from few minutes to few hours). The PVOH film attempts to **recover** its original shape when contacted with the aqueous composition. Partially filling of the **container** reduces the risk of rupture of the **container** if it is subjected to shock and reduces the risk of leakage if the **container** is subjected to high temperatures. The obtained anhydrous PVOH film has excellent shape and size stability, hence it does not immediately shrink after thermoforming. Therefore the need for immediate filling is



eliminated. A laminate of two or more PVOH layers **prevents leakage** through **pinholes**, since the pinholes rarely coincide with each other. The **containers** are easy to use, as they are simply added to domestic washing machine or water in a bucket where they dissolve.

Dwg.0/0

L8 ANSWER 6 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-105122 [14] WPIDS

DOC. NO. NON-CPI: N2002-078156

DOC. NO. CPI: C2002-032224

TITLE: **Device for collecting** cell specimens, especially for DNA extraction, comprises a swab shaft and tube with matching labels.

DERWENT CLASS: A89 B04 D16 P31

INVENTOR(S): BELCHER, K M; TRIPP, P D

PATENT ASSIGNEE(S): (INNO-N) INNOVATIVE GENETIC TECHNOLOGY

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6312395	B1	20011106	(200214)*		8

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6312395	B1	US 1999-342693	19990629

PRIORITY APPLN. INFO: US 1999-342693 19990629

AN 2002-105122 [14] WPIDS

AB US 6312395 B UPAB: 20020301

NOVELTY - **Device for collecting** cell specimens, comprising a shaft, a swab fixed to one end of the shaft, and a tube dimensioned to receive the swab, where the tube and shaft have corresponding identifying features to facilitate matching the shaft to the tube, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an apparatus for **collecting** cell specimens, comprising a shaft with a swab fixed to one end and a cap fixed to the other end, where the cap has **ventilation holes** covering at least 50% of its surface area;

(2) **collecting** cell cultures using a multi-apex swab of dental foam enclosed in a capped tube, where the swab is attached to the cap by a shaft, comprising:

- (a) removing the cap and swab from the tube;
- (b) **collecting** cells;
- (c) replacing the swab in the tube;
- (d) securing the cap onto the tube;
- (e) venting the **collected** cells to ambient air; and
- (f) drying the cells, while the swab is in the tube, for DNA extraction.

USE - The **device** is useful for **collecting** and transporting cell specimens, especially dental swab specimens, for DNA extraction and analysis.

ADVANTAGE - The identifying features reduce the likelihood of contamination among cell specimens.

DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of the **device**, in which the identifying features are labels attached to the tube and to a cap fixed to the shaft.

Shaft 16

Swab 18

Cap 20

Tube. 22

Dwg.2/4

L8 ANSWER 7 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2001-602628 [68] WPIDS

DOC. NO. CPI: C2001-178516

TITLE: **Device** for hybridizing cultivation of *Cordyceps sinensis* in good quality under specified conditions for application in foods as tonic and immunity booster, or in drugs.

DERWENT CLASS: B04 D16

INVENTOR(S): SUN, L; SUN, S

PATENT ASSIGNEE(S): (SUNS-I) SUN S

COUNTRY COUNT: 90

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001066692	A1	20010913	(200168)*	ZH	23
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000031430	A	20010917	(200204)		
EP 1275710	A1	20030115	(200306)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001066692	A1	WO 2000-CN50	20000310
AU 2000031430	A	AU 2000-31430	20000310
		WO 2000-CN50	20000310
EP 1275710	A1	EP 2000-908918	20000310
		WO 2000-CN50	20000310

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000031430	A Based on	WO 2001066692
EP 1275710	A1 Based on	WO 2001066692

PRIORITY APPLN. INFO: WO 2000-CN50 20000310

AN 2001-602628 [68] WPIDS

AB WO 200166692 A UPAB: 20011121

NOVELTY - A **device** for cultivating *Cordyceps sinensis* comprises a culture vessel for placing in a cultivation chamber, both of which are constructed specifically for allowing *Cordyceps sinensis* to grow well.

DETAILED DESCRIPTION - A **device** for cultivating *Cordyceps*

sinensis comprises a culture vessel for placing in a cultivation chamber including a bottom and a main body which is installed with a door, with layers of separating boards for the culture vessels to stand, air-holes for ventilation, temperature and humidity controls as well as illumination device. The culture vessel comprises a bottom and cover which is provided with several through-holes equipped with elastic plugs. An INDEPENDENT CLAIM is also included for a method for cultivating Cordyceps sinensis comprising:

(a) **collecting** many Cordyceps sinensis strains of the same genus from different sources for selection, removing dirt and impurities, and washing for cutting the head portion into 5-mm segments and sterilization;

(b) preparing the aqueous solution of a test-tube culture medium for microbial strains from 1-5% sugar, 0.1-1% peptone, 0.01-1% phosphate, 0.01-1% sulfate, 0.5-5% agar, boiled liquid with 5% wheat bran and water;

(c) hybridizing cultivation by inoculating the prepared Cordyceps sinensis strains into the test tube for incubation for 5-15 days to cultivate a hybrid microbial strain (Accession Number: CGMCCN00439, Cordyceps sinensis, which includes liquid and solid microbial strains;

(d) preparing a cultivation medium from 100 parts cereal, 1-5 parts dry silkworm chrysalis powder and 0-90 parts nutrient liquor;

(e) packing the medium into separate vessels to a thickness of 10-15 mm, and **sealed** with the ventilated cover for sterilization;

(f) inoculating the hybrid strain into the vessels then transferring into the cultivation chamber for cultivation at 5-30 deg. C, at relative humidity of 60-65 while excluding light until the hyphae have spread through the medium and covering the surface, followed by light irradiation to stimulate primordial differentiation by keeping light intensity at 300-400 lux, temperature at 3-50 deg. C, relative humidity at 65-85 to encourage growth to a convex shape on the surface and supplying sufficient oxygen to produce Cordyceps sinensis embryo encarpiums;

(g) cultivating the embryo encarpiums in the chamber while regulating the temperature at 3-50 deg. C, relative humidity at 65-85 and light intensity of 200-400 lux to allow the encarpiums to grow with increase of oxygen supply for 20-90 days to give a product; and

(h) **collecting** Cordyceps sinensis encarpium while leaving the immature ones for further cultivation, and embryo encarpiums having exhausted their nutrient being dug out for drying as starting material for dried healthcare products.

USE - The produced Cordyceps sinensis is for application in foods as tonic and immunity booster, or in drugs (all claimed), including as nourishment, healthcare products, for disease prevention, cancer prevention or anti-cancer drugs, and anti-aging.

ADVANTAGE - Cordyceps sinensis is obtainable by cultivation with ease, at low cost, compared to that produced naturally or by the prior-art methods.

DESCRIPTION OF DRAWING(S) - Flow-chart of the method for cultivating Cordyceps sinensis. (Drawing includes non-English language text).

**Collecting** Cordyceps sinensis 1

preparing the aqueous solution of medium 2

cultivating hybrid 3

preparing medium 4

distributing the medium into culture vessel 5

cultivating embryo encarpium 6

cultivating encarpium of Cordyceps sinensis 7

**collecting** encarpium of Cordyceps sinensis 8

Dwg. 3/3

DOC. NO. CPI: C1999-013900  
 TITLE: Ventilated waste **collecting container**  
 - has circulating air flow through the **contained**  
 organic matter to minimise offensive odours and water is  
 allowed to drain from the waste.  
 DERWENT CLASS: D16  
 INVENTOR(S): KNOCK, K K; LIN, D J  
 PATENT ASSIGNEE(S): (KNOC-I) KNOCK K K; (LIND-I) LIN D J  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5843768	A	19981201	(199904)*		9

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5843768	A	US 1996-779979	19961223

PRIORITY APPLN. INFO: US 1996-779979 19961223

AN 1999-044588 [04] WPIDS

AB US 5843768 A UPAB: 19990127

Ventilated waste **collecting container** has an enclosed volume (12) of the bucket like portion (1) ventilated by a solid penetration shaft (4) which penetrates the **sealable** lid (3) and passes air to and from the drainage chamber (7) below the suspended floor (5).

Air below the suspended floor (5) circulates through **ventilation/drainage holes** (6) and the enclosed volume (12) and the **contained** waste. Water drains from the waste through the holes (6) and **collects** in drainage chamber (7) below the floor (5).

When the lid (3) is **sealed**, the insects can only reach the waste following the air path. When the insects are in the enclosed volume (12), they tend to be trapped and cannot find their way out.

USE - The **container** is useful for **collecting** and storing compost forming waste while minimising offensive odours and the accumulation of insect or other pests by providing specially designed ventilation and drainage.

ADVANTAGE - The **container**, which is easy to use, empty and clean and which is economical to manufacture has circulating air to maintain aerobic conditions to minimising offensive odours that would accompany anaerobic conditions.

Water drains and **collects** in the drainage chamber below the suspended floor when it cannot contribute to anaerobic conditions in the waste. The escape of insect pests is inhibited by a circuitous path which they must follow to escape the **container**.

Dwg.1/5

L8 ANSWER 9 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 1998-297764 [26] WPIDS

DOC. NO. NON-CPI: N1998-232967

TITLE: Universal plug for **containers** used in **collecting** heath care fluids e.g. blood - has stepped posts with each having a ring for **sealing** internal surface of the **container** and chamfer for allowing easy insertion.

DERWENT CLASS: Q33  
 INVENTOR(S): CONSTABLE, K N  
 PATENT ASSIGNEE(S): (SMIK) SMITHKLINE BEECHAM CORP  
 COUNTRY COUNT: 70  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9821109	A1	19980522	(199826)*	EN	12
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AU BA BB BG BR CA CN CZ EE GE HU ID IL IS JP KP KR LC LK LR LT LV MG MK MN MX NO NZ PL RO SG SI SK SL TR TT UA US UZ VN YU					
AU 9851750	A	19980603	(199842)		
EP 1015336	A1	20000705	(200035)	EN	
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE SI					
NZ 335580	A	20010126	(200109)		
MX 9904354	A1	19991201	(200110)		
JP 2001503718	W	20010321	(200122)		14
AU 2001054150	A	20010920	(200166)	#	

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9821109	A1	WO 1997-US20447	19971112
AU 9851750	A	AU 1998-51750	19971112
EP 1015336	A1	EP 1997-946615	19971112
		WO 1997-US20447	19971112
NZ 335580	A	NZ 1997-335580	19971112
		WO 1997-US20447	19971112
MX 9904354	A1	MX 1999-4354	19990511
JP 2001503718	W	WO 1997-US20447	19971112
		JP 1998-522718	19971112
AU 2001054150	A Div ex	AU 1998-51750	19971112
		AU 2001-54150	20010629

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9851750	A Based on	WO 9821109
EP 1015336	A1 Based on	WO 9821109
NZ 335580	A Based on	WO 9821109
JP 2001503718	W Based on	WO 9821109

PRIORITY APPLN. INFO: US 1996-30859P 19961112; AU 2001-54150  
 20010629

AN 1998-297764 [26] WPIDS

AB WO 9821109 A UPAB: 19980701

The plug comprises three posts (1,2,3) with the inner most post (3) being the smallest diameter ring and sized to fit small diameter tube. The medium (2) is medium sized, and the outer (1) sized to fit the largest diameter tubes. The outer incorporates a knurled (4) outer surface for gripping and has a honeycomb appearance.

Ribs (5) of the honeycomb provide stability and strength to the plug using removal, and a top surface is provided with a vent (7) for pressure release from the tube. two rings (9,10) are provided to form seal on the top inserted on rings.

ADVANTAGE - The holes are sized to prevent

medical samples from leaking or moisture from entering.  
Dwg.2/2

L8 ANSWER 10 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
ACCESSION NUMBER: 1997-366182 [34] WPIDS  
DOC. NO. NON-CPI: N1997-304331  
DOC. NO. CPI: C1997-117517  
TITLE: Electrochemical e.g. alkaline manganese dioxide cells and  
**collectors**. - Uses structurally sculptured, rigid  
washer adjacent to bottom plate controlling position of  
current **collector** assembly **seal**  
body..  
DERWENT CLASS: L03 X16  
INVENTOR(S): DAVIDSON, G J; KENYON, K H; PASSANITI, J L  
PATENT ASSIGNEE(S): (RAYV) RAYOVAC CORP  
COUNTRY COUNT: 4  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 785585	A1	19970723	(199734)*	EN	32
R: DE FR GB					
US 6010802	A	20000104	(200008)		
EP 785585	B1	20020130	(200209)	EN	
R: DE FR GB					
DE 69618922	E	20020314	(200226)		

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 785585	A1	EP 1996-308600	19961128
US 6010802	A	US 1996-589610	19960122
EP 785585	B1	EP 1996-308600	19961128
DE 69618922	E	DE 1996-618922	19961128
		EP 1996-308600	19961128

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 69618922	E Based on	EP 785585

PRIORITY APPLN. INFO: US 1996-589610 19960122

AN 1997-366182 [34] WPIDS

AB EP 785585 A UPAB: 19970820

The current **collector** has a stiff, rigid washer (20) adjacent to a bottom plate (24) to control the position of the **seal** body (14) of the current **collector** assembly (10). The washer has a structurally sculptured cross-section, hardening its temper and providing a plateau (88) next to the bottom plate.

Washer **vent holes** in the bottom plate are located away from the most vulnerable central region and the current **collector** assembly permits safe effective venting of pressure in the cell.

USE - Reduces early activation of venting structures, **contains** low part-count, is easy to make and provides superior tolerance to outside impact forces.

Dwg.3B/11

L8 ANSWER 11 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 1997-024574 [03] WPIDS  
 DOC. NO. NON-CPI: N1997-020412  
 TITLE: Vacuum solar heat energy **collector** installed in rooftop for warm water supply - has metallic water preservation **container** made with multiple water supply **holes** on lower side air **vent holes** on top side.  
 DERWENT CLASS: Q74  
 PATENT ASSIGNEE(S): (NIUM) NIPPON ELECTRIC GLASS CO  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 08285378	A	19961101	(199703)*		5

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 08285378	A	JP 1995-116291	19950417

PRIORITY APPLN. INFO: JP 1995-116291 19950417

AN 1997-024574 [03] WPIDS

AB JP 08285378 A UPAB: 19970115

The **collector** consists of a glass shell (11) into which a metallic water preservation **container** (18) is installed. The **container** has an inner tube part (18b) inserted into an outer tube part (18a). The outer shell part coated with selective absorption film is **sealed** at the bottom and made conical shape at the top. The annular space inbetween the outer and inner shell parts are covered by annular ring parts (18c, 18d) separately. Multiple water supply holes (18c') of diameter 15mm are provided on the bottom ring part which enables smooth water flow in the lower side.

Multiple air **vent holes** (18d') are made on the top annular ring part which have size of 3mm in diameter, so that water does not flow out easily. An entrance side header tube (19) is inserted into the inner tube part of the water preservation **container** and an exit side heater tube (20) is connected to the conical termination of outer tube part. The water supplied through the entrance side header is heated by solar heat at the metallic water preservation **container** and discharges through the exit side header.

ADVANTAGE - Maintains constant water temperature. Reduces weight.  
 Dwg.1/1

L8 ANSWER 12 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 1995-246732 [33] WPIDS  
 DOC. NO. NON-CPI: N1995-191660  
 TITLE: Stockpiled grain sampler for quality control management - has elongated tube spanning from outside silo base to just inside silo lid with movable guided gate within tube having openings which align and misalign with openings along tube length.  
 DERWENT CLASS: S03  
 INVENTOR(S): BOYDLE, T; OBRIEN, P; O'BRIEN, P  
 PATENT ASSIGNEE(S): (BOYD-I) BOYDLE T; (OBRI-I) O'BRIEN P; (OBRI-I) OBRIEN P  
 COUNTRY COUNT: 4  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
AU 9481722	A	19950629	(199533)*		24
CA 2138852	A	19950625	(199539)		
US 5567888	A	19961022	(199648)		12
NZ 270284	A	19970526	(199727)		
AU 696906	B	19980924	(199850)		

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
AU 9481722	A	AU 1994-81722	19941223
CA 2138852	A	CA 1994-2138852	19941222
US 5567888	A	US 1994-365600	19941227
NZ 270284	A	NZ 1995-270284	19950105
AU 696906	B	AU 1994-81722	19941223

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 696906	B Previous Publ.	AU 9481722

PRIORITY APPLN. INFO: AU 1994-6252 19940616; AU 1993-3154  
19931224

AN 1995-246732 [33] WPIDS

AB AU 9481722 A UPAB: 19950824

The sampler includes an elongated tube (2) having a through passage (3) which communicates between upper and lower ends (4,5). The grain **collection** tube preferably spans from outside the silo base to just inside a silo lid (19). The tube includes guides (7) between which travels a moveable gate (8). The gate has at least one opening (9) which, depending on its position relative to the tube, aligns or misaligns with the tube openings (6).

When the sampler is fixed to a grain storage silo, the lower end extends beyond the silo floor (10). The gate terminates at an end (11) in a **seal** (12) which locates partially within the silo and partially outside. The operator opens lid (17) which allows grain which enters through the passage to fall into an operator held **receptacle**.

USE/ADVANTAGE - Monitoring of moisture and/or protein levels and vermin damage. Provides grain sample representative of all grain in silo as enables samples to be taken from incremental depths within silo without breaking **seal** within storage **container**.

Dwg.1/7

ABEQ US 5567888 A UPAB: 19961202

A storage **container** with a **device** for obtaining a sample of stockpiled granular material, comprising:

a silo having a base and a top;

an elongated tubular member extending through said base and into said silo, said tubular member being provided with an array of interspaced first holes along at least one side of said tubular member, said tubular member being mounted to said silo at said base and proximately to said top;

an elongated plate with a plurality of interspaced second holes, said elongate plate being juxtaposed to said one side of said tubular member; and

manually operable shifting means operatively connected to said plate



for manually shifting said plate longitudinally along said one side of said tubular member alternately to place said second holes in alignment with respective ones of said first holes to enable **collection** of granular samples via said tubular member from said silo and to displace said first holes relative to said second **holes** to **prevent** entry of granular material into said tubular member from said silo, said shifting means essentially comprising a mechanical lever linkage including a moving part extending through said base and further including a manually operable lever pivoting about an anchorage, said lever being pivotably connected to said moving part and located outside said silo wherein said silo is provided at said top with a lid for covering an opening in said top, further comprising additional shifting means operatively connected to said lid and to said tubular member for enabling a manual shifting of said lid relative to said top to alternately open and close said opening.  
Dwg.2/7

L8 ANSWER 13 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 1995-241740 [32] WPIDS  
 DOC. NO. NON-CPI: N1995-188431  
 TITLE: **Collection** equipment for harmless disposal of fluids - has hand-transportable **collecting container** with **collecting** and transport chambers with protruding flat funnel and outlet to **collecting** vessel.  
 DERWENT CLASS: Q39 Q51  
 INVENTOR(S): HAEGER, K  
 PATENT ASSIGNEE(S): (HAEG-N) HAEGER HANDELS GMBH  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 4431037	A1	19950706	(199532)*		13

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 4431037	A1	DE 1994-4431037	19940901

PRIORITY APPLN. INFO: DE 1993-4330241 19930907

AN 1995-241740 [32] WPIDS

AB DE 4431037 A UPAB: 19950818

The equipment has a large-capacity **collecting** vessel with **bungholes** and a **vent**, and to which a **collecting container** (10), transportable by hand, can be connected. The **container** incorporates a transport chamber (14) which can be **sealed** off, in addition to the **collecting** chamber (13).

These form an assembly with a flat funnel (15) protruding beyond the **collecting** chamber sides, and are connected together by an outlet (22), which can be shut off, at the lowest point (21) of the inclined **collecting** chamber bottom (20). The transport chamber has an outlet (9) with a connection (8) to the **collecting** vessel (2).

USE/ADVANTAGE - The equipment is particularly for automotive cooling and brake fluids. It gives a safe **collection**, transport and buffer storage of fluids.

Dwg.1/14

L8 ANSWER 14 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 1987-057910 [09] WPIDS  
 DOC. NO. NON-CPI: N1987-043884  
 DOC. NO. CPI: C1987-024089  
 TITLE: Primary galvanic cell - with improved zinc layer construction.  
 DERWENT CLASS: A85 L03 X16  
 INVENTOR(S): COSTENOBLE, U; HENNRICH, R  
 PATENT ASSIGNEE(S): (VART) VARTA BATTERIE AG; (VART) VARTA AG  
 COUNTRY COUNT: 12  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 212180	A	19870304	(198709)*	GE	9
R: AT BE CH DE FR GB IT LI NL SE					
DE 3529723	A	19870305	(198710)		
JP 62044954	A	19870226	(198714)		
US 4726779	A	19880223	(198811)		5
EP 212180	B1	19920902	(199236)	GE	6
R: AT BE CH DE FR GB IT LI NL SE					
DE 3686618	G	19921008	(199242)		

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 212180	A	EP 1986-109163	19860704
DE 3529723	A	DE 1985-3529723	19850820
JP 62044954	A	JP 1986-192205	19860819
US 4726779	A	US 1986-895877	19860812
EP 212180	B1	EP 1986-109163	19860704
DE 3686618	G	DE 1986-3686618	19860704
		EP 1986-109163	19860704

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 3686618	G Based on	EP 212180

PRIORITY APPLN. INFO: DE 1985-3529723 19850820

AN 1987-057910 [09] WPIDS

AB EP 212180 A UPAB: 19930922

The cell **contains** a thickened alkaline electrolyte, an inner electrode of Zn-powder **contained** in a paste and an outer electrode of MnO<sub>2</sub> or Ag<sub>2</sub>O pressed in the form of a hollow cylinder. The Zn-paste is forced into the form of a concentric layer adjacent to the cathode-layer (3) by the presence of a displacement part attached to the anode-conductor.

The shape of the displacer is adapted to the construction of the cell. It **contains** holes and slits to allow the electrolyte to contact both the central anode-pin (9) and the Zn-paste. The **holes** are small enough to **prevent** the Zn-paste from penetrating to the central chamber. The displacer is made of plastic, metal or metallised plastic.

USE/ADVANTAGE - The position and shape of the Zn-paste electrode can be forced and retained into the optimal one for consistent and efficient operation.

0/3

ABEQ DE 3686618 G UPAB: 19930922

The cell **contains** a thickened alkaline electrolyte, an inner electrode of Zn-powder **contained** in a paste and an outer electrode of MnO<sub>2</sub> or Ag<sub>2</sub>O pressed in the form of a hollow cylinder. The Zn-paste is forced into the form of a concentric layer adjacent to the cathode-layer (3) by the presence of a displacement part attached to the anode-conductor.

The shape of the displacer is adapted to the construction of the cell. It **contains** holes and slits to allow the electrolyte to contact both the central anode-pin (9) and the Zn-paste. The **holes** are small enough to **prevent** the Zn-paste from penetrating to the central chamber. The displacer is made of plastic, metal or metallised plastic.

USE/ADVANTAGE - The position and shape of the Zn-paste electrode can be forced and retained into the optimal one for consistent and efficient operation.

ABEQ EP 212180 B UPAB: 19930922

Galvanic primary element which has alkaline electrolyte, which **contains**, in a cup-shaped metal housing in a concentric arrangement, an inner negative electrode of zinc powder made into a paste and an outer manganese oxide or silver oxide electrode in the form of an annular cylinder with an interposed separator, and which has arranged centrally in the housing a sleeve of a displacement body, this sleeve bearing against the zinc powder made into a paste, characterised in that the negative **collector** is a metal pin passing through a **sealing** body (8), in that the sleeve (10) of the displacement body is secured to the metal pin (9) and is of alkali-resistant plastics which holds the zinc powder (7) of the anode, which floats in the thickened electrolyte, pressed radially against the separator surface (4,5) in that the wall of the hollow body is provided with cutouts through which electrolyte can penetrate, but through which zinc paste is greatly impeded from penetrating, into the hollow space, and in that the anode space has a **collection** space for evolving gas.

1/3

ABEQ US 4726779 A UPAB: 19930922

Galvanic primary cell with a thickened alkaline electrolyte has an inner space for a pasty Zn powder negative electrode. There is also an outer ring-shaped cylinder of Mn dioxide or Ag oxide forming a positive electrode and an interposed separator. In the improvement a hollow displacement body is in the inner space so that the Zn powder is radially pressed against the positive electrode.

ADVANTAGE - Loss of contact due to decomposition or segregation of the Zn electrolyte gel is eliminated.

L8 ANSWER 15 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 1984-302775 [49] WPIDS

DOC. NO. NON-CPI: N1984-225708

DOC. NO. CPI: C1984-128839

TITLE: Equipment to **seal** annular space around bore **holes** after cementation - **preventing** cement seepage and ingress of pressurised gas or fluid.

DERWENT CLASS: H01 Q49

INVENTOR(S): FARUKSIN, L H; GAJVORONZS, A A; GALUSZTJAN, V A; LISZOV, A I; MADER, L; MORZSIC, P A; ZSOKA, I

PATENT ASSIGNEE(S): (MASX) MAGYAR SZENHIDROGENIPARI

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
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HU 33233 T 19841029 (198449)\*

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
HU 33233	T	HU 1982-883	19820324

PRIORITY APPLN. INFO: HU 1982-883 19820324

AN 1984-302775 [49] WPIDS

AB HU 33233 T UPAB: 19930925

Equipment for **sealing** off immediately cementation is completed the annular space around bore holes sink for oil, water or mineral **recovery**. It prevents or reduces seepage of cement slurry into the porous rock layers surrounding the bore hole, prevents the intrusion of high pressure fluid or gas into the bore hole and the flow of these in the annular space, thus improving the quality of the casing.

The equipment represents a technical advance over similar **devices** used in the past for this purpose, because of its greater capacity to expand, because it provides higher strength in the concrete casing and increases prodn. safety.

L8 ANSWER 16 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 1984-190495 [31] WPIDS

DOC. NO. NON-CPI: N1984-142386

DOC. NO. CPI: C1984-079991

TITLE: Sampler for hydrogen determination in molten metal - has refractory vacuum tube with a fusible end and space for **collecting** hydrogen released by solidified metal.

DERWENT CLASS: J04 M24 S03

INVENTOR(S): GOTO, S; KAWASE, H; OHTSUBO, T

PATENT ASSIGNEE(S): (JPAN-N) JAPAN ANALYST CORP; (NIAN-N) JAPAN ANALYST CORP; (YAWH) NIPPON STEEL CHEM CO; (YAWA) NIPPON STEEL CORP

COUNTRY COUNT: 7

## PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 114688	A	19840801	(198431)*	EN	29
R: DE FR GB					
JP 59138956	A	19840809	(198440)		
US 4590809	A	19860527	(198624)		
CA 1205651	A	19860610	(198628)		
EP 114688	B	19870916	(198737)	EN	
R: DE FR GB					
DE 3466286	G	19871022	(198743)		
KR 8701397	B	19870725	(198810)		
JP 03005547	B	19910125	(199108)		
EP 114688	B2	19930609	(199323)	EN	14
R: DE FR GB					

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 114688	A	EP 1984-100607	19840120
JP 59138956	A	JP 1983-12649	19830131
US 4590809	A	US 1985-748134	19850624
JP 03005547	B	JP 1983-12649	19830131

EP 114688

B2

EP 1984-100607 19840120

PRIORITY APPLN. INFO: JP 1983-6748 19830122; JP 1983-12649  
19830131

AN 1984-190495 [31] WPIDS

AB EP 114688 A UPAB: 19930925

Sampler for H2 analysis of molten metal comprises an inorganic refractory vacuum tube (8) with an end (9) which melts in the molten metal allowing a sample to be drawn into an inner tube (10). The walls of the latter are H2-permeable and H2 released as the sample solidifies passes through the walls into a space (14) defined by the two tubes.

Appts. for H2 analysis of molten metal consists of: the above sampler; a **sealed** holder; means for breaking the sampler in the holder; and an H2 gas analyser.

ADVANTAGE - **Device** overcomes prior art problems by being heat-resistant and non-contaminating, small in vol. and having no O-ring **seals**.

4a/8

ABEQ EP 114688 B UPAB: 19931115

A sampler for the hydrogen analysis of molten metal comprising: a vacuum tubular body provided at one end thereof with a suction end (9) which is meltable upon immersion in molten metal to form an opening for the suction of said molten metal; and an inner tube (10) connected to said suction end (9), formed from a hydrogen-permeable material and defining a cavity in which said molten metal, when drawn thereinto through said opening, is solidified into a sample having a predetermined shape; said tubular body defining therein a hollow space (14) located contiguous to said inner tube (10) for **collecting** the hydrogen released from said molten metal during its solidification, wherein the vacuum tubular body has a wall (8) formed from an inorganic refractory material, and at least a portion of said wall which is brought into contact with said molten metal and slag is coated with a mould release agent.

Dwg.4a/8

ABEQ US 4590809 A UPAB: 19930925

Molten metal samples are taken for determination of H content by a sampling **device** having a vacuum tubular body with wall (8) of low thermal conductivity inorganic refractory impermeable to H, in which a thin steel sample tube (10) is supported by holding members (13). At one end is a suction end (9) of reduced thickness, which can melt to form an opening. The sample tube has a number of **vent holes** (12) and a heat sink (11). Hydrogen, but not molten metal, flows through the **vent holes** into a hollow space (14) within the tubular body through the spaces between the holding members.

ADVANTAGE - Refractory resists metal heat, no metal cap is used and analytical error thereby is avoided, and samples can be taken from metal at very high temp.

L8 ANSWER 17 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 1982-03318E [02] WPIDS

TITLE: Stirring **device** for laboratory and semi-industrial use - has shaft and magnetic stirrer with self-lubricating bearings and **seal** formed by water vapour condensing in a chamber.

DERWENT CLASS: J04

INVENTOR(S): BARDINA, V M; ZAVALNYI, M A

PATENT ASSIGNEE(S): (AMVI-R) A MED POLIO VIRUS

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 814430	B	19810323	(198202)*		3

PRIORITY APPLN. INFO: SU 1979-2767826 19790524

AN 1982-03318E [02] WPIDS

AB SU 814430 B UPAB: 19930915

Stirring **device** for use under laboratory and semi-industrial conditions has **container** (3), shaft (5) with magnetic stirrer at the bottom end (4), and self-lubricating bearings (1), positioned inside a **sealed** chamber (2) which is connected to the lid of the **container** (3). Reliability of the **sealing** and the quality of the mixts. are increased, on account of the expulsion of solid particles formed where there is a frictional pair, by providing the shaft with a chamber (9), positioned coaxially to the **sealed** chamber (2), in which condensate **collects**. This chamber (9) is made as a bowl, and the bearings (1) are made with **ventilation** **holes**.

1

L8 ANSWER 18 OF 30 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 1975-C0226W [08] WPIDS

TITLE: Straight-through or branch box - is **sealed** with polyurethane after application of aluminium foil and **enclosure** in mould.

DERWENT CLASS: W01 X12

PATENT ASSIGNEE(S): (BAUE-I) B BAUER

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 2340759	A	19750213	(197508)*		

PRIORITY APPLN. INFO: DE 1973-2340759 19730809; DE 1973-333163  
19731127

AN 1975-C0226W [08] WPIDS

AB DE 2340759 A UPAB: 19930831

The box of metal or plastic material is split axially or radially and encloses the cables to be joined. To prevent adhesion of the **sealing** compound to the box, this is covered with aluminium foil or plastic material. The box is then held by distance pieces in a **recoverable** mould. The end discs of the mould have holes for the cable entries and can be exchanged according to requirements.

The mould has injection and **vent** **holes**.

L8 ANSWER 19 OF 30 JAPIO (C) 2003 JPO on STN

ACCESSION NUMBER: 2001-044324 JAPIO

TITLE: RESIN-**SEALED** SEMICONDUCTOR **DEVICE**  
AND MANUFACTURE THEREOF

INVENTOR: MIYATA KOJI

PATENT ASSIGNEE(S): SHARP CORP

PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
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JP 2001044324 A 20010216 Heisei H01L023-12

## APPLICATION INFORMATION

STN FORMAT: JP 1999-216108 19990730  
 ORIGINAL: JP11216108 Heisei  
 PRIORITY APPLN. INFO.: JP 1999-216108 19990730  
 SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
 Applications, Vol. 2001

AN 2001-044324 JAPIO

AB PROBLEM TO BE SOLVED: To accurately control the distance between first through-holes for external connection and a **sealing** resin end by arranging a plurality of second through-holes, all of whose openings are covered with a conductive film on the side of a first region, in a second region excluding the first region, so that a cutting line can be checked surely.

SOLUTION: First through-holes, arranged on an area array on which external connection terminals 4 are mounted, are formed in a wiring board 5, and at the same time, second through-holes 11 are formed also. Thereafter, a conductive film is formed on a surface on which to mount a semiconductor chip 1, and a wiring pattern 6 and a land 7 for external connection are formed. Simultaneously therewith, a conductive pattern 10 is formed in a manner covering the entire surfaces of the openings of the **holes**

11. The pattern 10 **prevents** the leakage of a **sealing** resin 2 from the holes 11 and further facilitates the checking of a cutting line. Furthermore, the chip 1 mounted on the single board 5 is divided into two regions for **collective sealing** with the resin 2. As a result, productivity can be improved and quality can be stabilized.

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L8 ANSWER 20 OF 30 JAPIO (C) 2003 JPO on STN

ACCESSION NUMBER: 1999-206561 JAPIO  
 TITLE: RICE CAKE STORAGE **DEVICE** FOR HEATING BY  
 MICROWAVE OVEN AND RICE CAKE WITH STORAGE  
**DEVICE** FOR HEATING AND RICE CAKE COOKING  
 METHOD

INVENTOR: YAMAZAKI AKIRA  
 PATENT ASSIGNEE(S): ECHIGO SEIKA CO LTD  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 11206561	A	19990803	Heisei	A47J027-00

## APPLICATION INFORMATION

STN FORMAT: JP 1998-11706 19980123  
 ORIGINAL: JP10011706 Heisei  
 PRIORITY APPLN. INFO.: JP 1998-11706 19980123  
 SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
 Applications, Vol. 1999

AN 1999-206561 JAPIO

AB PROBLEM TO BE SOLVED: To simply cook a rice cake piece by a microwave oven so that it becomes soft on the whole by scattering and forming a plurality of **ventilation holes** for steam **ventilation** in a baglike storage body having an opening part on one side thereof and forming this storage body by a material which withstands heating by the microwave oven to such a size that can store the rice cake piece.  
 SOLUTION: A storage body 1 is formed by a synthetic resin material which can withstand heating by a microwave oven and a plurality of **ventilation holes** 3 for steam **ventilation** are

scattered and formed therein. Moreover, the storage body 1 has such a size that a clearance is formed around a rice cake piece 4 and in the storage body 1 when the rice cake piece 4 is stored in the storage body 1. A **sealing** means is not formed in an opening part 2 of this storage body 1, and the outside of the storage body 1 communicates with the inside thereof in ventilation at all times. When the rice cake piece 4 is stored in this storage body 1 and is heated by a microwave oven, the steam generated from the rice cake piece 4 is discharged out of the storage body 1 properly from the **ventilation holes** 3 and the opening part 2, and the steam **collected** in the storage body 1 reaches square fringe parts of the rice cake piece 4 to heat and cook the whole rice cake piece 4 so that it becomes soft.  
COPYRIGHT: (C)1999,JPO

L8 ANSWER 21 OF 30 JAPIO (C) 2003 JPO on STN  
ACCESSION NUMBER: 1998-326632 JAPIO  
TITLE: CYLINDRICAL AIR BATTERY  
INVENTOR: ISHIDA OSAMU  
PATENT ASSIGNEE(S): HITACHI MAXELL LTD  
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 10326632	A	19981208	Heisei	H01M012-06

## APPLICATION INFORMATION

STN FORMAT: JP 1997-154531 19970527  
ORIGINAL: JP09154531 Heisei  
PRIORITY APPLN. INFO.: JP 1997-154531 19970527  
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1998

AN 1998-326632 JAPIO

AB PROBLEM TO BE SOLVED: To increase the filling amount of a negative electrode material so as to provide a high capacity cylindrical air battery having an excellent large current discharge characteristic by arranging the thermal melting part of a cylindrical separator to coincide in position with that of the side wall part of a cylindrical air electrode.

SOLUTION: A cylindrical separator 2 is inserted into the inner peripheral side of a cylindrical air electrode 1 such that the position of its thermal melting part 2a coincides with that of the side rail part 1a of the air electrode 1. The inner peripheral side of the cylindrical separator 2 is filled with zinc paste **containing** a mixture of zinc, carboxymethyl cellulose and alkaline electrolyte as a negative electrode. A negative electrode terminal plate having a negative electrode **collector** rod fixed is fixed by inserting its peripheral edge part into an annular gasket, the annular gasket is fitted in a frame body, the opening part of the air electrode 1 is **sealed** by watertightly fixing or welding the connecting parts of both, surrounded by a metal jacket having **ventilation holes** and, by caulking it, a single-phase.3 type cylindrical air battery is provided.

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L8 ANSWER 22 OF 30 JAPIO (C) 2003 JPO on STN  
ACCESSION NUMBER: 1995-144146 JAPIO  
TITLE: **DEVICE** FOR SEPARATING RESIDUAL GAS FROM GAS VESSEL  
INVENTOR: KOBAYASHI TADAHICO  
PATENT ASSIGNEE(S): FUJI SEIKI MACH WORKS LTD  
PATENT INFORMATION:



PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 07144146	A	19950606	Heisei	B02C023-36

## APPLICATION INFORMATION

STN FORMAT: JP 1993-317453 19931125  
 ORIGINAL: JP05317453 Heisei  
 PRIORITY APPLN. INFO.: JP 1993-317453 19931125  
 SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1995

AN 1995-144146 JAPIO

AB PURPOSE: To surely separate residual gas to **recover** a gas by causing gas vessels in which the residual gas is **sealed** to flow down into noncombustible liquid and crushing the gas vessels in the noncombustible liquid.  
 CONSTITUTION: Gas vessels 3 in which a gas remains are thrown in a hopper 4 and flowed down into a passage of a chute 5, and are pushed by a ratchet 15<SB>3</SB> with the transfer of a chain belt 12<SB>1</SB> to flow down into noncombustible liquid 1, and crushed by the engagement of cutting blades of crushing fixtures 19<SB>1</SB>, 19<SB>2</SB> and broken down into fragments 28. When the gas vessels 3 are crushed, the gas remaining in the vessels is discharged therefrom and flows out into the noncombustible liquid 1 and rises to enter the 1st hood 29. The liquid entrained in the gas is removed by a liquid removing **device** 32 and the gas alone is sent to a desired place through a vent cylinder 30. The gas blown out to outside the 1st hood 29 is caught by the 2nd hood 34 and sent to a desired place from **vent holes** 37, 38. Fragments 28 are sent to outside a casing 2 by a conveyor 26 and stored in a pan 27.  
 COPYRIGHT: (C)1995, JPO

L8 ANSWER 23 OF 30 JAPIO (C) 2003 JPO on STN

ACCESSION NUMBER: 1994-190899 JAPIO  
 TITLE: EXTRUDER EQUIPPED WITH COOLING **DEVICE** FOR MOLDING MOLD  
 INVENTOR: IKEHARA HIROKI  
 PATENT ASSIGNEE(S): SEKISUI CHEM CO LTD  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 06190899	A	19940712	Heisei	B29C047-86

## APPLICATION INFORMATION

STN FORMAT: JP 1992-346483 19921225  
 ORIGINAL: JP04346483 Heisei  
 PRIORITY APPLN. INFO.: JP 1992-346483 19921225  
 SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1994

AN 1994-190899 JAPIO

AB PURPOSE: To assure product quality by a method in which a **sealing** member for passage holes is installed on the periphery of a mandrel, and a heating medium is introduced from one passage hole to be circulated through a spiral channel and **recovered** from the other passage hole to cool a mold while preventing the leakage of the heating medium.  
 CONSTITUTION: A heating medium, which is fed from outside a molding mold 3 to one passage hole 5a of a bridge 5, after being circulated from one passage hole 32a of a mandrel 32 through a passage formed between a spiral channel 10a and the inner surface of the mandrel 32, is **recovered**

through the other passage hole 32a of the mandrel 32 and the other passage hole 5a of the bridge 5, so that the mandrel 32 is cooled by the heating medium. A **sealing** member 11 is installed on the periphery of a cooling mold 10 at the position outside its passage holes 10c, 10d to **prevent** the leakage of the heating medium beyond the engagement surface between the cooling mold 10 and the mandrel 32. The **sealing** member 11 is also installed on the periphery of the mandrel 32 over its passage hole 32a to prevent the leakage of the heating medium beyond the engagement surface between the mandrel 32 and the bridge 5.

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L8 ANSWER 24 OF 30 JAPIO (C) 2003 JPO on STN  
 ACCESSION NUMBER: 1992-367472 JAPIO  
 TITLE: OXYGEN SCAVENGER ATTACHED IN MOUTH OF  
**CONTAINER**  
 INVENTOR: YAMAZAKI HIROYASU; OZAKI KIYOSHI  
 PATENT ASSIGNEE(S): NIPPON SODA CO LTD  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 04367472	A	19921218	Heisei	B65D081-26

#### APPLICATION INFORMATION

STN FORMAT: JP 1991-156003 19910531  
 ORIGINAL: JP03156003 Heisei  
 PRIORITY APPLN. INFO.: JP 1991-156003 19910531  
 SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
 Applications, Vol. 1992

AN 1992-367472 JAPIO

AB PURPOSE: To obtain an independent oxygen scavenger which cant be safely **recovered**, by a method wherein the inside of a **container** in which contents are filled is **sealed** after the oxygen scavenger is attached on the **container** in such a way that a flange of a holder main body having **vent holes** is put on the upper rim of the mouth of the **container**.  
 CONSTITUTION: An oxygen scavenger consists of a plastic holder main body 1, a plastic film cover 3 fixed on the inner face of the bottom of the main body 1 and oxygen scavenger compounds 7 enclosed in the holder main body 1. The holder main body 1 is molded into a cup shape with a flange 2 and has **vent holes** 5 on the bottom, and the cover 3 is made of a gas-permeable laminated film that consists of one or more layers and is impermeable to water under the normal pressure. A gas-permeable part 6 of the laminated film is made by laminating non-woven fabric 8 that is impermeable to water under the normal pressure or fine-porous membrane 7 that has very fine pores with diameters of 0.01-30 $\mu$ m and is impermeable to water under the normal pressure, and **sealed** on the bottom of the holder main body 1. The flange 2 of the holder main body 1 is provided with a handle flap 4 that is larger than the outside diameter of the mouth of a **container**, and a packing material 14 is attached on a contact face where the flange 2 is in contact with the mouth of the **container**.

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L8 ANSWER 25 OF 30 JAPIO (C) 2003 JPO on STN  
 ACCESSION NUMBER: 1991-216951 JAPIO  
 TITLE: HALOGEN LAMP WITH MIRROR  
 INVENTOR: MIYASHITA HISASHI; KODAMA MASAYOSHI; SUNAI YUKIO;  
 HATAKEYAMA ATSUSHI

PATENT ASSIGNEE(S): HITACHI LTD  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 03216951	A	19910924	Heisei	H01K007-02

## APPLICATION INFORMATION

STN FORMAT: JP 1990-10611 19900122  
 ORIGINAL: JP02010611 Heisei  
 PRIORITY APPLN. INFO.: JP 1990-10611 19900122  
 SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
 Applications, Vol. 1991

AN 1991-216951 JAPIO

AB PURPOSE: To improve the cooling effect of a lamp **seal** section and obtain a halogen lamp with higher reliability by providing **vent holes** on the base section of a mirror.  
 CONSTITUTION: This **device** is constituted of a lamp 5 and a mirror 6 fixed to the lamp 5, and multiple **ventilating holes** 7 preferably with the diameter 1.5 mm or above are provided on the base section outside the light **collecting** face of the mirror 6. The air heated by the hot lamp 5 can be efficiently removed to the outside of the lamp 5, the heating of the **seal** section of the lamp 5 is prevented, the high-temperature section of the lamp 5 can be cooled by the ventilation of the lamp 5, and the temperature of the **seal** section can be further lowered. The lamp 5 with high reliability is obtained.  
 COPYRIGHT: (C)1991, JPO&Japio

L8 ANSWER 26 OF 30 JAPIO (C) 2003 JPO on STN  
 ACCESSION NUMBER: 1989-288275 JAPIO  
 TITLE: MAGNETIC TREATING **DEVICE**  
 INVENTOR: KAWASHIMA HIROO  
 PATENT ASSIGNEE(S): KAWASHIMA HIROO  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 01288275	A	19891120	Heisei	A61N001-42

## APPLICATION INFORMATION

STN FORMAT: JP 1987-55427 19870312  
 ORIGINAL: JP62055427 Showa  
 PRIORITY APPLN. INFO.: JP 1987-55427 19870312  
 SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
 Applications, Vol. 1989

AN 1989-288275 JAPIO

AB PURPOSE: To eliminate the loss of magnetism and to effectively impart a magnetic effect to the human body by constituting the magnetic treating **device** of the many projecting bodies formed by fitting magnetic materials and cells into which air is **sealed**, in this order, into the projecting bodies in tight contact with each other, **sealing** the cells with bottom films, packing a supporting material into the spacings between the projecting bodies and using polyethylene which is bored with **vent holes** or is porous as the material to constitute the supporting material.  
 CONSTITUTION: The magnetic treating **device** is constituted by fitting the cylindrical permanent magnets 2 inscribing the cylindrical projecting bodies 1 into said bodies then fitting the cylindrical plastic cells 4 into which the air 3 is **sealed** into said bodies in tight

contact with the projecting bodies and **sealing** the cells with the tough bottom films 5 which are highly resistant to rupture. The plastic or the like is packed into the spacings between the bodies 1 to form such supporting body 7 which prevents the bodies 1 from oscillating. The **vent holes** 8 are bored to said body to improve vertical ventilation. This magnetic treating **device** consists of the many projecting bodies 1 constituted in such a manner. The cells 4 which are the closed cells and into which the air 3 is **sealed** act as air cushions to push back the permanent magnets 2 when force is exerted onto the projecting bodies 1 from above. The circulation of the blood is improved and the **recovery** from fatigue and the elimination of stresses are enabled by the magnetic effect of the permanent magnets 2.

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L8 ANSWER 27 OF 30 JAPIO (C) 2003 JPO on STN  
 ACCESSION NUMBER: 1989-000640 JAPIO  
 TITLE: MANUFACTURE OF **SEALING** BODY FOR BATTERY  
 INVENTOR: HORINOUCI TAKU  
 PATENT ASSIGNEE(S): DAIICHI GAIYAA KK  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 64000640	A	19890105	Showa	H01M002-08

#### APPLICATION INFORMATION

STN FORMAT: JP 1987-154411 19870623  
 ORIGINAL: JP62154411 Showa  
 PRIORITY APPLN. INFO.: JP 1987-154411 19870623  
 SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1989

AN 1989-000640 JAPIO

AB PURPOSE: To surely operate an explosion-proof vent by forming a **sealing** body for a battery made of thermoplastic resin by injection molding and forming a thin part as the explosion-proof vent by cutting.

CONSTITUTION: In an alkaline battery, a resin **sealing** body 1 is fitted to a metallic **container** 7, and a current **collecting** rod 5 is passed through a hole 2 in the **sealing** body 1. The top of the **container** 7 serves as a positive terminal and the end of the current **collecting** rod 5 serves as a negative terminal. The **sealing** body 1 made of thermoplastic resin such as polypropylene is formed by injection molding. The **sealing** body 1 is fixed to a lathe and turned, then cut with a cutting tool 9 to form a thin part 4. The thickness of the thin part is made uniform. The thin part has no pin **holes** and welds and is **prevented** from increasing strength caused by molecular orientation. The thin part is surely operated as an explosion-proof vent.

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L8 ANSWER 28 OF 30 JAPIO (C) 2003 JPO on STN  
 ACCESSION NUMBER: 1983-138545 JAPIO  
 TITLE: COOLING METHOD OF CONTINUOUS CASTING **DEVICE**  
 INVENTOR: TERAMOTO NOBUO; NUMAZAWA MAKOTO  
 PATENT ASSIGNEE(S): SUMITOMO METAL IND LTD  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
-----				

JP 58138545      A      19830817      Showa      B22D011-124

## APPLICATION INFORMATION

STN FORMAT:      JP 1982-21877      19820212  
 ORIGINAL:      JP57021877      Showa  
 PRIORITY APPLN. INFO.:      JP 1982-21877      19820212  
 SOURCE:      PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
                  Applications, Vol. 1983

AN 1983-138545      JAPIO

AB PURPOSE: To eliminate the sticking of scale thoroughly and to prevent the generation of breakout, by supplying pure water through an expansion tank disposed in a high place, circulating the same in **sealed** piping systems and **recovering** heat in proper places.  
 CONSTITUTION: An expansion tank 1 is disposed in a higher place than a mold 2 and guide rolls 3, and pure water is supplied therein through a piping 4. The head pressure thereof is utilized as the thrusting pressure of a water feed pump 5 for the mold and a feed water pump 6 for closing of the machine, by which the water is fed to the mold 2, the rolls 3 and pinch rolls 7. Back pressure is provided to said water by the tank 1 after cooling to **prevent** blow **holes** in the mold 2 and the rolls 3. Heat is **recovered** from the heated cooling water by a heat pump 15 interposed in a supply piping 8 for cooling water to heat the supply water to a "Fron " turbine, whereafter the cooling water is passed through a heat exchanger 9 to cool and is again supplied cyclically.  
 COPYRIGHT: (C)1983,JPO&Japio

L8 ANSWER 29 OF 30      JAPIO      (C) 2003 JPO      on STN

ACCESSION NUMBER:      1980-162553      JAPIO  
 TITLE:      VENTILATING **DEVICE**  
 INVENTOR:      YANATORI MICHIO; HASEGAWA KENGO; UCHIDA MIKIKAZU  
 PATENT ASSIGNEE(S):      HITACHI LTD  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 55162553	A	19801217	Showa	F24F007-08

## APPLICATION INFORMATION

STN FORMAT:      JP 1979-68959      19790604  
 ORIGINAL:      JP54068959      Showa  
 PRIORITY APPLN. INFO.:      JP 1979-68959      19790604  
 SOURCE:      PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
                  Applications, Vol. 1980

AN 1980-162553      JAPIO

AB PURPOSE: To obtain a small-shaped ventilating **device** with heating and cooling functions whose air resistance is small and whose airflow can be enlarged.  
 CONSTITUTION: In the upper and lower fan boxes separated by a partitioning wall 5 once-through fans 8 and 9 whose blades have the same directions and heat exchangers 18 utilizing evaporation and condensation are provided, while on the upper end of the heat exchangers 18 coolers 19 are provided and on the lower end thereof heaters 20 are provided. On the side of a wall 10 **vent holes** for **ventilating-cooling** 14a and 14b as well as **vent holes** for heat **collection** 15a and 15b are formed, while **vent holes** 17a and 17b are formed in small-box bodies 16 on the inside of a chamber. Around the fans 8 and 9 front-and-rear surface casings 24a, 24b, 25a and 25b are provided rotatably, while **sealing** members 32 are supported by support plates 34 and 36 having **vent holes** for heat **collection** 33a, 33b, 35a and 35b. In

ducts 37a and 37b facing the **vent holes** 35a, 35b, 15a and 15b **vent holes** for cool and warm air 39a and 39b as well as dampers 40a and 40b are provided, and **vent holes** are opened and closed by rotating casings 24a, 24b, 25a and 25b, thereby the blowing directions of the fans 8 and 9 can be shifted.  
COPYRIGHT: (C)1980,JPO&Japio

L8 ANSWER 30 OF 30 JAPIO (C) 2003 JPO on STN  
ACCESSION NUMBER: 1980-116038 JAPIO  
TITLE: VENTILATION **DEVICE**  
INVENTOR: YANATORI MICHIO; HASEGAWA KENGO; UCHIDA MIKIKAZU  
PATENT ASSIGNEE(S): HITACHI LTD  
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 55116038	A	19800906	Showa	F24F007-08

## APPLICATION INFORMATION

STN FORMAT: JP 1979-21863 19790228  
ORIGINAL: JP54021863 Showa  
PRIORITY APPLN. INFO.: JP 1979-21863 19790228  
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1980

AN 1980-116038 JAPIO

AB PURPOSE: To prevent the decrease in air flow at the time of cooling ventilation by employing a flow-through fan and rotating casings located before and behind the fan so as to shift the direction of air-flow.  
CONSTITUTION: On a ventilating route divided by a partition wall 5 are provided a heat exchanger 4 and upper and lower flow-through fans 8 and 9, and in a square body 13 on the side of wall 10 are provided airing holes 14a and 14b for cooling **ventilation**, as well as airing **holes** 15a and 15b for heat **collection**, while in the square body 16 on the side inside a chamber 11 being provided airing holes 17a and 17b. Around the fans 8 and 9 front casings 18a and 18b, as well as back casings 19a and 19b are installed in such a state that they can rotate between **sealing-up** members 20. In conducting heat **collection** through ventilation at the time of heating or cooling, casings 18a, 18b, 19a and 19b are rotated to the positions shown in the figures to form the ventilating route passing through the heat exchanger 4. When the cooling ventilation is made at summer night etc., the casings 18a, 18b, 19a and 19b are rotated to open the airing holes 14a, 14b, 17a and 17b, while closing airing holes 21a, 21b, 23a and 23b.  
COPYRIGHT: (C)1980,JPO&Japio

=&gt; d que stat 17

L1 274531 SEA FILE=HCAPLUS ABB=ON (?DEVICE? OR ?CLOSURE? OR ?RECEPTACLE?  
OR ?CONTAIN?) AND (?COLLECT? OR ?RECOVER? OR ?AMASS?)

L3 4651 SEA FILE=HCAPLUS ABB=ON L1 AND (?SEAL? OR ?PREVENT?(W)?LEAK?)

L5 2 SEA FILE=HCAPLUS ABB=ON L3 AND (?COLOR? OR ?OPAQUE?) (3A)?COAT?  
AND (?PEEL? OR ?REMOV?)

L6 3 SEA FILE=HCAPLUS ABB=ON L3 AND (?COLOR? OR ?OPAQUE?) (3A)?COAT?  
AND (?CHANGE? OR ?MODIF? OR ?ALTER?)

L7 4 SEA FILE=HCAPLUS ABB=ON L5 OR L6

=&gt; d ibib abs 17 1-4

L7 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:517838 HCAPLUS  
DOCUMENT NUMBER: 121:117838  
TITLE: Discharge and transfer system for apparatus for  
gelatin coating tablets.  
INVENTOR(S): Berta, Norbert I.  
PATENT ASSIGNEE(S): McNeill-PPC, Inc., USA  
SOURCE: Eur. Pat. Appl., 28 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 607009	A1	19940720	EP 1994-300167	19940111
EP 607009	B1	19980923		
R: AT, CH, DE, DK, ES, FR, GB, IT, LI, SE				
EP 485138	A1	19920513	EP 1991-310166	19911104
EP 485138	B1	19960417		
R: BE, CH, DE, ES, FR, GB, IT, LI				
ZA 9108750	A	19930504	ZA 1991-8750	19911104
ES 2088474	T3	19960816	ES 1991-310166	19911104
AU 9187013	A1	19920521	AU 1991-87013	19911105
AU 645362	B2	19940113		
JP 05212092	A2	19930824	JP 1991-349354	19911105
JP 3345036	B2	20021118		
US 5436026	A	19950725	US 1993-3348	19930112
IN 181592	A	19980718	IN 1994-CA8	19940106
IN 180645	A	19980228	IN 1994-CA14	19940110
IN 180718	A	19980314	IN 1994-CA15	19940110
IN 180973	A	19980411	IN 1994-CA13	19940110
AU 9453130	A1	19940721	AU 1994-53130	19940111
AU 684475	B2	19971218		
CN 1104935	A	19950712	CN 1994-101770	19940111
CN 1065424	B	20010509		
AT 171369	E	19981015	AT 1994-300167	19940111
ES 2122157	T3	19981216	ES 1994-300167	19940111
BR 9400088	A	19941011	BR 1994-88	19940112
JP 07116228	A2	19950509	JP 1994-14026	19940112
JP 3360297	B2	20021224		
CN 1080108	B	20020306	CN 1994-101779	19940112
PRIORITY APPLN. INFO.:				
			US 1993-3348	A 19930112
			US 1990-609482	A 19901105

AB An app. and method for **coating** products with two **colors**  
includes a first **coating** section, a second coating section and a

side to side transfer **device** for transferring products from the first to the second sections. The transfer **device** includes a pair of plate grippers each having a movable upper jaw and a movable lower jaw. The upper and lower jaws are each adapted to receive and retain a product carrier plate. The transfer **device** includes a cam follower that precisely closes the upper and lower jaws so that carrier plates located in the jaws are positioned in registration with each other in order to clamp product between the plates and to maintain the product clamped in the plates while the grippers are transferred between the first and second conveyor guides. An unloading station includes breaker pins for breaking a **seal** that may be formed between the coating material applied in the first coating section and the carrier plates. At a discharge station the carrier plates are rotated to cause the product to fall to a **collection** bin. Clean out bars adapted to be extended through the carrier plates while the plates are in the rotated discharge position cause any product that may have adhered to the plate and any excess coating material on the plate to be **removed**.

L7 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1956:66336 HCAPLUS

DOCUMENT NUMBER: 50:66336

ORIGINAL REFERENCE NO.: 50:12361h-i,12362a-i,12363a-i,12364a-i,12365a

TITLE: American Society for Testing Materials, Standards, 1955, VI. Plastics, electrical insulation, rubber, electronics

SOURCE: (1955), 1734 pp.

DOCUMENT TYPE: Book

LANGUAGE: Unavailable

AB cf. C.A. 47, 8937e. Standards or tentative standards, adopted or revised in 1955, are given for: sample prepn. for phys. testing of rubber products; natural rubber AO insulation for wire and cable; testing molded materials used for elec. insulation; friction tape for elec. purposes; test for sapon. no. of petroleum products; testing varnishes used for elec. insulation; testing elec. porcelain; testing elec. insulating oils; rubber insulating tape; rubber insulating gloves; test for dielec. breakdown voltage and dielec. strength of elec. insulating materials at com. power frequencies; test for a.-c. capacitance, dielec. const., and loss characteristics of elec. insulating materials; testing solid filling and treating compds. used for elec. insulation; rubber matting for use around elec. app.; sampling and testing untreated paper used for elec. insulation; testing sheet and plate materials used for elec. insulation; test for impact resistance of plastics and elec. insulating materials; test for elec. resistance of insulating materials; test for conducting paths in elec. state; testing varnished cloths and varnished cloth tapes used for elec. insulation; cotton rubber-lined fire hose; chem. analysis of rubber products; test for hardness of rubber; cotton goods for rubber and pyroxylin coating and methods of test therefor; testing laminated tubes, laminated round rods, flexible varnished tubing; pasted mica, and flexible treated sleeving used for elec. insulation; natural muscovite mica based on visual quality; natural rubber performance insulation for wire and cable; black bias-cut varnished cloth and varnished cloth tape used for elec. insulation; test for thickness of solid elec. insulation; testing flat rubber belting and rubber hose; testing molding powders used in manufg. molded elec. insulators; test for abrasion resistance of rubber compds. and for compression set of vulcanized rubber; testing shellac, vulcanized fiber, and steatite used for elec. insulation; tension testing of vulcanized rubber; tests for adhesion of vulcanized rubber, and for adhesion of vulcanized rubber to metal; dynamic testing for ply sepn. and cracking of rubber products; air pressure heat test of vulcanized rubber; natural rubber heat-resisting insulation for wire and cable; testing



rubber and thermoplastic insulated wire and cable; test for **change** in properties of elastomeric vulcanizates resulting from immersion in liquids; test for acetone extn. of phenolic molded or laminated products; test for high-voltage, low-current arc resistance of solid elec. insulating materials; test for resistance to light checking and cracking of rubber compds.; testing hard rubber products; test for indentation of rubber; natural rubber sheath for wire and cable; test for index of refraction of transparent org. plastics; test for resistance of plastics to chem. reagents; testing glass spool insulators; measuring shrinkage from mold dimensions of molded materials used for elec. insulation; test for viscosity and total solids content of rubber cements; test for flammability of plastics 0.050 in., over, and under in thickness; measuring the flow properties of thermoplastic molding materials; water absorption test for plastics; testing automatic hydraulic brake hose; tests for accelerated aging of vulcanized rubber; O3-resisting insulation for wire and cable; test for compression-deflection characteristics and for phys. state of cure of vulcanized rubber; test for punching quality of phenolic laminated sheets; conditioning plastics and elec. insulating materials for testing; test for colorfastness of plastics to light; test for deformation of plastics under load; testing automotive air brake and vacuum brake hose; test for compression fatigue and tear resistance of vulcanized rubber; test for product uniformity of phenolic laminated sheets; test for diffusion of light by plastics; test for surface irregularities of flat transparent plastic sheets; test for tensile properties of plastics; testing asphalt compn. battery **containers**; molds for test specimens of plastic molding materials; test for heat distortion temp. of plastics; tensile strength test of molded elec. insulating materials; measuring mica stampings used in electronic **devices** and incandescent lamps; measuring dimensions of rigid tubes used for elec. insulation; test for power factor and dielec. const. parallel with laminations of laminated sheet and plate insulating materials; tests for repeated flexural stress, mar resistance, coeff. of linear thermal expansion, shear strength, and stiffness in flexure of plastics; long-time creep or stress relaxation tests of plastics under tension or compression loads at different temps.; nomenclature of descriptive terms pertaining to plastics; test for indentation of rubber; test for compressive properties of rigid plastics; phenolic, polystyrene, melamine-HCHO, urea-HCHO, vinyl chloride-acetate resins, and vinylidene chloride molding compds.; cellulose nitrate and cast methacrylate plastic sheets, rods, and tubes; cellulose acetate and cellulose acetate butyrate molding and extrusion compds.; vinyl chloride polymer and copolymer rigid sheets; laminated thermosetting materials; vulcanized fiber sheets, rods, and tubes used for elec. insulation; low-and medium-voltage pin-type lime-glass insulators and tests therefor; measuring molding index of thermosetting molding powder; shear strength of plastics; testing compressed asbestos sheet packing; insulated wire and cable-polyvinyl insulating compd.; elastomer compds. for automotive applications; test for low-temp. brittleness of rubber and rubberlike materials; measuring dimensions of rigid rods used for elec. insulation; nonrigid vinyl chloride-acetate resin plastics; nonrigid vinyl chloride plastics; test for brittleness temp. of plastics and elastomers; test for stiffness in flexure of plastics; natural block mica and mica films suitable for use in fixed mica-dielec. capacitors; calibrating a light source used for accelerating the deterioration of rubber; test for resistance of accelerated light aging of rubber compds.; testing rubber-coated fabrics; heavy and light duty neoprene sheaths for wire and cable; synthetic rubber heat-resisting insulation and performance insulation for wire and cable; test for resistance of plastics to accelerated service conditions; test for flammability of plastics, self-extinguishing type; test for impact resistance and tensile and compressive properties of plastics at subnormal

and supernormal temps.; orange shellac and other Indian lacs for elec. insulation; test for Rockwell hardness of plastics and elec. insulating materials; cellulose acetate plastic sheets; ethyl cellulose and methacrylate molding compds.; nylon injection molding and extrusion compns.; tests for flexural properties, sp. gr., and coeff. of cubical thermal expansion of plastics; test for luminous reflectance, transmittance, and color of materials; test for short-time stability at elevated temps. of plastics **contg.** Cl; detg. permanent effect of heat on plastics; accelerated weathering of plastics; molding test specimens of phenolic materials; test for Young's modulus in flexure of natural and synthetic elastomers at normal and subnormal temps.; test for resistance of vulcanized rubber or synthetic elastomers to crack growth; test for permeability of vulcanized rubber or synthetic elastomers to volatile liquids; test for H permeability of rubber-coated fabrics; testing rubber cements; testing cellulose acetate butyrate; cast allyl plastic sheets, rods, tubes, and shapes; operating light and water exposure app. (C-arc type) for testing paint, varnish, lacquer, and related products; test for gas content of insulating oils; conditioning of rubber and plastic materials for low-temp. testing; identification and quant. analysis of synthetic elastomers; test for NH<sub>3</sub> in PhOH-HCHO molded materials; heat aging of vulcanized natural or synthetic rubber; GR-S synthetic rubber sheath for wire and cable; nonrigid polyvinyl tubing and methods of testing; test for dielec. strength of insulating oil of petroleum origin; test for inorg. chloride and sulfates in insulating oils; communication and signal pin-type lime-glass insulators; test for deviation of line of sight through transparent plastics; test for tensile properties of thin plastic sheets and films; definitions of terms relating to plastics, methods of mech. testing, sp. gr., and rheological properties of matter; estg. blocking of plastic sheets; testing askarels; testing varnished glass fabrics and varnished glass fabric tapes used for elec. insulation; sampling elec. insulating oils; test for power factor and dielec. const. of elec. insulating oils of petroleum origin; test for contact and migration stain of vulcanized rubber in contact with org. finishes; test for plasticity and **recovery** of rubber and rubberlike materials; test for viscosity of rubber and rubberlike materials; test for mechanical properties of elastomeric vulcanizates under compressive or shear strains; test for bond strength of plastics and elec. insulating materials; test for bearing strength of plastics; test for apparent d. and bulk factor of nonpouring molding powders; measuring shrinkage from mold dimensions of molded plastics; molding specimens of amino plastics; detg. mold surface temps. of com. molds for plastics; detg. temps. of standard ASTM molds for test specimens of plastics; detection of free S in insulating oils; test for vol. resistivity of electrically conductive rubber and rubberlike materials; testing pressure-sensitive adhesive tapes used for elec. insulation; test for strength properties of adhesives in shear by tension loading; test for haze and luminous transmittance of transparent plastics; test for tear resistance of plastic film and sheeting; code for designating form of material and direction of testing plastics; testing glass-bonded mica used as elec. insulation; purchase of uninhibited mineral oil for use in transformers and in oil circuit breakers; measuring **changes** in linear dimensions of plastics; test for stiffness properties of nonrigid plastics as a function of temp.; resistance of transparent plastics to surface abrasion; sampling and testing plasticizers used in plastics; thermoplastic vinyl polymer sheath compd. for elec. insulating cords and cables; rubber insulating blankets, insulator hoods, insulating line hose, and insulating sleeves; test for resistance of vulcanized rubber or synthetic elastomers to cut growth; measuring low-temp. stiffening of rubber, and rubberlike materials; test for impact resistance, resilience, and penetration of rubber; latex foam rubbers and sponge and expanded

cellular rubber products, and methods of test therefor; concd. NH<sub>3</sub> preserved, creamed and natural rubber latex and methods of test therefor; test for curing characteristics of vulcanizable mixts. during heating; absorbent laminating paper for elec. insulation; test for evaluating pressure-sealing properties of rubber and rubberlike materials; test for power factor and dielec. const. of natural mica; injection molding of specimens of thermoplastic materials; test for compressibility and **recovery** of gasket materials; test for discoloration of vulcanized rubber-org. finish **coated** or light **colored**; test for accelerated O<sub>3</sub> cracking of vulcanized rubber; testing hydrocarbon waxes used for elec. insulation; test for insulation resistivity of elec. insulating oils of petroleum origin; nonmetallic gasket materials; test for weather-resistance exposure of automotive rubber compds.; test for bursting strength of round rigid plastic tubing; test for warpage of sheet plastics; test for apparent d. and bulk factor of granulated thermoplastic molding powder; **enclosures** and servicing units for tests above and below room temp.; polyester molding compds.; cellulose acetate sheet and film for primary insulation; test for volatile loss from plastic materials; test for measurement of **changes** in linear dimensions of nonrigid thermoplastic sheeting or film; testing adhesives for brake lining and other friction materials; test for resistance to aging of vulcanized rubber by measurement of creep; classifying elastomeric compns. for resilient automotive mountings; test for low-temp. compression set of vulcanized elastomers; test for measuring flow rates of thermoplastic; test for resistance of plastic films to extn. by chemicals; test for resistance to abrasion of plastic materials; test for specific viscosity of vinyl chloride polymers; polyethylene molding and extrusion materials; primary octyl phthalate ester plasticizers; test for corrosive S in elec. insulating oils; nonrigid thermoplastic compds. for automotive and aeronautical applications; test for harmful dirt in crude natural rubber; test for shrinkage of molded and laminated thermosetting plastics at elevated temps.; laminated thermosetting decorative sheets and methods of test therefor; test for total Cl in vinyl chloride polymers and copolymers; test for adhesives relative to their use as elec. insulation; elec. insulating paper-interlayer type; tests for sludge formation in mineral transformer oils; test for water in insulating oils by extn.; evaluating low-temp. characteristics of rubber and rubberlike materials; sheet rubber packing; testing silicone insulating varnishes; standard test temps. for rubber and rubberlike materials; construction of rubber insulated wire and cable; polyethylene insulated wire and cable; O<sub>3</sub>-resisting Bu rubber insulation for wire and cable; cleaning plastic specimens for insulation resistance testing; O<sub>3</sub>-resistant rubber insulating tape; verification of testing machines; sieves for testing purposes; definition of term:screen; test for softening point by ring and ball app.; designating significant places in specified limiting values; definitions with procedures relating to conditioning and weathering; operation of light- and water-exposure app. for artificial weathering test; detn. of pH of aq. solns. with glass electrode; verification of calibration **devices** for verifying testing machines; verification and classification of extensometers; cell-type oven with controlled rates of ventilation; test for measuring water vapor transmission of materials in sheet form; recommended practice for maintaining const. relative humidity by means of aq. solns.; probability sampling of materials; detn. of Young's modulus at room temp.; bend testing of wire; testing sleeves and tubing for radio-tube cathodes; test for temper of strip and sheet metals for electronic **devices** and lamps; round Ni wire for lamps and electronic **devices**; test for d. of fine wire and ribbon for electronic **devices** and lamps; test for surface flaws in W **seal** rod and wire; test for diam. by weighing of fine wire used in electronic **devices** and lamps; measuring residual stress in

cylindrical metal-to-glass **seals**; testing fine round and flat wire for electronic **devices**; cathode melt prove-in testing; circular cross-section Ni cathode sleeves for electronic **devices**; 17 and 28% Cr-Fe alloy for **sealing** to glass; round Cr-Cu wire for electronic **devices**; test for sag of W wire; test for relative thermionic emissive properties of materials used in electron tubes; test for sublimation characteristics of metallic materials; W and Mo wires under 20 mils in diam.; round wire for use as electron tube grid laterals and verticals; and test for interface impedance characteristics of vacuum tube cathodes.

L7 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1953:52694 HCAPLUS

DOCUMENT NUMBER: 47:52694

ORIGINAL REFERENCE NO.: 47:8937e-i,8938a-i,8939a-i,8940a

TITLE: American Society for Testing Materials, Standards,

1952. VI. Rubber, plastics, electrical insulation (1952), 1488 pp.

SOURCE:

DOCUMENT TYPE: Book

LANGUAGE: Unavailable

AB Standards or tentative standards, adopted or revised in 1952, are given for: tests for viscosity, plasticity, and **recovery** of rubber and rubberlike materials; test for curing characteristics of vulcanizable rubber mixts. during heating; chem. analysis of rubber products; identification and quant. analysis of synthetic elastomers; **changes** in properties of rubber and rubberlike materials in liquids; permeability of vulcanized rubber or synthetic elastomers to volatile liquids; test for impact resistance of plastics and elec. insulating materials; sample prepn. for phys. testing of rubber products; tension testing of vulcanized rubber; phys. state of (T-50 test) cure of vulcanized rubber; tests for adhesion of vulcanized rubber and of its adhesion to metal; test for strength properties of adhesives in shear by tension loading; abrasion resistance of rubber compds.; Young's modulus in flexure of natural and synthetic elastomers at normal and subnormal temps.; test for tear resistance, compression set, and compression fatigue of vulcanized rubber; test for hardness of rubber; tests for indentation of rubber; test for compression-deflection characteristics of vulcanized rubber; test for low-temp. compression set of vulcanized elastomers; test for compressibility and **recovery** of gasket materials; mech. properties of elastomeric vulcanizates under compressive or shear strains; test for impact resilience and penetration of rubber; test for ply sepn. and cracking of rubber products; tests for resistance of vulcanized rubber or synthetic elastomers to crack growth and cut growth; test for softening point; definitions of terms relating to methods of testing; tests for accelerated aging of vulcanized rubber; test for heat aging of vulcanized or synthetic rubber; test for resistance to aging of vulcanized rubber; air-pressure heat test of vulcanized rubber; test for accelerated O3 cracking of vulcanized rubber; tests for resistance to accelerated light aging and light checking and cracking of rubber compds.; calibrating a light source used for accelerating the deterioration of rubber; test for contact and migration stain of vulcanized rubber in contact with org. finishes; test for weather-resistance exposure of automotive rubber compds.; definitions with procedures relating to conditioning and weathering; recommended practice for conditioning of rubber and plastic materials for low-temp. testing; test for brittleness temp. of plastics and elastomers; low-temp. brittleness of rubber and rubberlike materials; measuring low-temp. stiffening of rubber and rubberlike materials; test for stiffness properties of nonrigid plastics as function of the temp.; rubber and synthetic rubber compds. for aeronautical and automotive applications; tests for automotive air, vacuum, and hydraulic-brake hose;

test for **discoloration** of org. finish-coated or light-colored vulcanized rubber; test for vol. resistivity of electrically conductive rubber and rubberlike materials; recommended practice for classifying elastomeric compds. for resilient automotive mountings; nonmetallic gasket materials for general automotive and aeronautical purposes; tests for rubber hose and flat rubber belting; cotton rubber-lined fire hose; friction tape for elec. purposes; rubber insulating tape; test for pressure-sensitive adhesive tapes used for elec. insulation; rubber insulating gloves; rubber matting for use around elec. app.; rubber insulating blankets, hoods, line hose, and sleeves; rubber-coated fabrics; H permeability of rubber-coated fabrics; cotton goods for rubber and pyroxylin coating; test for rubber-insulated wire and cable; insulating wire and cable (Class AO 30% hevea rubber compd., heat-resisting rubber and synthetic rubber compds., O3-resistant-type insulation, performance rubber and synthetic rubber compds., and polyvinyl insulating compd.); rubber sheath compd. for elec. insulated cords and cables; GR-M polychloroprene sheath compd. for elec. insulated cords and cables; GR-S synthetic rubber and thermoplastic vinyl polymer sheath compds.; tests for hard-rubber products and asphalt-compn. battery **containers**; latex foam rubbers; sponge and expanded cellular rubber products; tests for rubber cements, viscosity and total solids content of rubber cements, and brake-lining adhesives and other friction materials; concd., NH3-preserved, creamed, and centrifuged natural-rubber latex; tests for compressed sheet packing asbestos and for evaluating pressure-sealing properties of rubber and rubberlike materials; test for stiffness in flexure of plastics; nonrigid vinyl chloride-acetate resin plastics; nonrigid vinyl chloride plastics; tests for dielec. strength, power factor, and dielec. const. of elec. insulating materials; test for elec. resistance of insulating materials; definitions of terms relating to sp. gr. and to rheological properties of matter; recommended practices for designating significant places in specified limiting values; cell-type oven with controlled rates of ventilation; phenolic, polystyrene, melamine-HCHO, urea-HCHO, cellulose acetate, cellulose acetate butyrate, vinyl chloride-acetate resin, vinylidene chloride, Et cellulose, methacrylate, and nylon injection molding compds.; cellulose nitrate plastic sheets, rods, and tubes; cast methacrylate and cast allyl plastic sheets, rods, tubes, and shapes; vinyl chloride-acetate resin and cellulose acetate plastic sheets; laminated thermosetting materials; vulcanized fiber sheets, rods, and tubes used for elec. insulation; nonrigid polyvinyl tubing; polyester molding compds.; cellulose acetate sheet and film for primary insulation; polyethylene molding and extrusion materials; primary octyl phthalate ester plasticizers; molds for test specimens of plastic molding materials; **enclosures** and servicing units for tests above and below room temps.; tests for bearing strength of plastics and of bond strength of plastics and elec. insulating materials; bursting strength of round rigid plastic tubing; compressive properties of rigid plastics; tests for flexural properties and repeated flexural stress of plastics; test for impact resistance of plastics at subnormal and supernormal temps.; test for punching quality of phenolic laminated sheets; tests for shear strength, stiffness in flexure, and tensile properties of plastics; tests for tear resistance and tensile properties of plastic films and sheets; tensile and compressive properties of plastics at subnormal and supernormal temps.; tensile strength of molded elec. insulating materials; long-time creep or stress-relaxation tests of plastics under tension or compression loads; test for abrasion resistance of transparent plastics; tests for abrasion and mar resistance of plastics; method for estg. blocking of plastic sheets; test for Rockwell hardness of plastics and elec. insulating material; tests for coeffs. of linear and cubical thermal expansion of plastics; test for deformation of plastics under load; tests for flammability of plastics; test for flow

properties of thermoplastic molding materials; flow of thermoplastics; heat distortion temp. of plastics; molding index of thermosetting molding powder; test for warpage of sheet plastics; deviation of line of sight through transparent plastics; diffusion of light by plastics; haze and luminous transmittance of transparent plastics; luminous reflectance and transmission characteristics and color of plastic materials; refractive index of transparent org. plastics; test for surface irregularities of flat transparent plastic sheets; tests for resistance of plastics to accelerated service conditions and to chem. reagents; test for **changes** in linear dimensions of plastics and of nonrigid thermoplastic sheeting or film; tests for colorfastness of plastics to light and of resistance of plastic films to extn. by chemicals; volatile loss from plastic materials; water absorption of plastics; water-vapor permeability of plastic sheets; wt. loss of plastics on heating; recommended practices for accelerated weathering of plastics, for operating light and water exposure app. for testing paint, varnish, lacquer, and related products, for detn. of permanent effect of heat on plastics, and for characteristics of standard C arc accelerated weathering unit; tests for acetone extn. of phenolic molded or laminated products, for acetyl and butyryl content of cellulose acetate butyrate, for NH<sub>3</sub> in PhOH-HCHO molded materials, for sampling and testing of plasticizers used in plastics, for short-time stability at elevated temps. of plastics **contg.** Cl, for sp. gr. of plastics, and for specific viscosity of vinyl chloride polymers; tests for apparent d. and bulk factor of granular thermoplastic molding powder and of nonpouring molding powders; tests for shrinkage from mold dimensions of molded plastics and of molded materials used for elec. insulation; test for molding powders used in manufg. molded elec. insulators; recommended practices for injection molding of specimens of thermoplastic materials, for molding specimens of phenolic materials and of amino plastics, for mold-surface temp. of com. molds for plastics, for temps. of standard ASTM molds for test specimens of plastics, and for transfer molding of specimens of phenolic materials; definitions of terms relating to plastics; descriptive nomenclature of objects made from plastics; code for designating form of material and direction of testing plastics; conditioning plastics and elec. insulating materials for testing; maintaining const. relative humidity; orange shellac and other Indian lacs for elec. insulation; tests for shellac and varnishes used for elec. insulation; test for molding powders used in manufg. molded elec. insulators; tests for molding materials, laminated tubes, laminated round rods, and of sheet and plate materials used for or in elec. insulation; tests for nonrigid polyvinyl tubing and for vulcanized fiber used for elec. insulation; measuring of dimensions of rigid tubes and rods used for elec. insulation; test for product uniformity of phenolic laminated sheets and for thickness of solid elec. insulation; recommended practice for purchase of uninhibited mineral oil for use in transformers and oil circuit breakers; tests for elec. insulating oils, askarels, and for inorg. chlorides and sulfates in insulating oils; tests for dielec. strength, insulation resistivity, power factor, and dielec. const. of insulating oils of petroleum origin; tests for gas content of insulating oils, for sapon. no. of petroleum products, and for sludge formation of mineral transformer oil; detection of free S in elec. insulating oils; communication, signal, and low and medium voltage pin-type lime-glass insulators; tests for pin-type lime-glass and glass spool insulators, for elec. porcelain, and for steatite and glass-bonded mica used as elec. insulation; tests for hydrocarbon waxes, and solid filling and treating compds. used for elec. insulation; flexible treated cotton and rayon sleeving used in elec. insulation; black bias-cut varnished cloth and varnished cloth tape used for elec. insulation; tests for flexible varnished tubing, varnished cloths, varnished cloth tapes, varnished glass fabrics, and varnished glass-fabric tapes used for elec. insulation;

absorbent laminating paper for elec. insulation; natural Muscovite mica; natural block mica and mica films for use in fixed mica-dielec. capacitors; test for power factor and dielec. const. of natural mica, for paste mica used in elec. insulation, and for mica stampings used in electronic **devices** and incandescent lamps; test for high-voltage, low-current arc-resistance of solid elec. insulating materials; test for power factor and dielec. const. parallel with laminations of laminated sheet and plate insulating materials; test for conducting paths in elec. slate; test for untreated paper used for elec. insulation; detn. of pH of aq. solns. with glass electrode; sieves for testing purposes; verification of testing machines and of calibrating **devices** for verifying testing machines; verification and classification of extensometers; and definitions of screen terms. Tentative revisions submitted in 1952 are given for: tests for indentation of rubber by Pusey and Jones plastometer, for diffusion of light by plastics, for luminous reflectance, transmittance, and color of materials, for dielec. strength of elec. insulating materials at com. power frequencies, for sheet and plate materials used in elec. insulation, for flexible varnished tubing used for elec. insulation, for power factor and dielec. const. of elec. insulating oils of petroleum origin, and for power factor and dielec. const. of natural mica.

L7 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1948:31587 HCAPLUS

DOCUMENT NUMBER: 42:31587

ORIGINAL REFERENCE NO.: 42:6685d-i, 6686a-i, 6687a-f, 6688a-i, 6689a-b, 6690a-b

TITLE: Photographic elements **containing**  
1,3,4-triazaindolizine cyanine dyes

INVENTOR(S): Heimbach, Newton

PATENT ASSIGNEE(S): General Aniline & Film Corp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 2443136		19480608	US	
GI	For diagram(s), see printed CA Issue.				
AB	This patent relates to new asym. photosensitizing dyes <b>contg.</b> the 1,3,4-triazaindolizine nucleus, which when added to photographic Ag halide emulsions increase the sensitivity of the emulsion, and these dyes being H <sub>2</sub> O-sol. are easily <b>removed</b> from the exposed emulsion layer during processing. The 1,3,4-triazaindolizine bases (I) give rise to a series of cyanine dyes, which are good senzitizers for photographic emulsions. These bases have the following formula II, where R <sub>1</sub> represents an alkyl group, R <sub>2</sub> represents H, alkyl, carbalkoxy, aryl, and R <sub>3</sub> and R represent H, alkyl, and aryl as in R <sub>2</sub> , aralkyl, alkoxyphenyl, and dialkoxyphenyl. The following 1,3,4-triazaindolizine derivs. are prepd. by heating 3-amino-1,2,4-triazole with a .beta.-diketone in abs. alc. in the presence of an org. base such as Et <sub>3</sub> N or piperidine: Compds. numbered 7, 8, and 15 are prepd. by heating the same triazole with Et ethoxymethylene-acetoacetate in glacial AcOH. The bases represented by the above formula and prepd. according to the above references and procedure are as follows: 5,7-di-Me; 5-methyl-7-phenyl (III); 5,7-dimethyl-2-phenyl (IV); 5,7-dimethyl-2-isopropyl (V); 5,7-dimethyl-2-propyl; 2,5,7-trimethyl (VI); 5,7-diethyl (VII); 5,7-dimethyl-6-phenyl; 5,7-diethyl-2-phenyl; 5,7-dimethyl-2-p-tolyl; 6-ethyl-5,7-dimethyl; 2,5,6,7-tetramethyl; 5,6,7-trimethyl; 2,5-dimethyl-7-phenyl; 5,7-dimethyl-2-(2-methoxyphenyl);				

5-methyl-7-(4-methoxyphenyl); 5-methyl-7-(2,4-dimethoxyphenyl); 5-ethyl-7-(4-methoxyphenyl)-2-propyl (VIII); 5-methyl-7-p-tolyl (IX). The following 1,3,4-triazaindolizine derivs. are prep'd. by heating the corresponding triazole with Et (ethoxymethylene)acetoacetate or analogous ester in glacial AcOH: 6-carbethoxy-5-methyl; 6-carbethoxy-5,7-dimethyl; 6-carbomethoxy-5-methyl-2-phenyl. These I form alkyl or aralkyl quaternary salts (X) and undergo condensation with cyclammonium quaternary cyanine dye salt intermediates (XI) **contg.** a reactive group. The dyes derived from X and XI have the general formulas XII and XIIa where R1 is alkyl or aralkyl, R, R2, and R3 have the same values as given above, R4 is H or alkyl, R5 is H or Me, X represents an anionic acid radical, Z represents the atoms necessary to complete a nitrogenous heterocyclic system of the type usual in cyanine dyes, e.g., pyridine, and n represents a pos. integer ranging from 1 to 2. I are converted into IX by fusion with an alkyl or aralkyl halide or by heating the base with an alkyl or aralkyl halide in a **sealed** tube in a H2O bath under increased pressure. A mol. equiv. of IX is then heated with a mol. equiv. of X in the presence of a condensing agent such as a heterocyclic nitrogenous base or an alc. in the presence of a tertiary base at reflux temp. Concns. of condensing agent may vary from 1 to 25 mols., but 1 to 15 mols. are preferred. The following examples are given. V.EtI 3.45, 2-methylmercapto-6-methoxy-quinoline-EtI 2.34 g., Et3N 2, and iso-PrOH 15 cc. are refluxed 1 hr. Upon cooling, XIII ppts. and is filtered and recrystd. from EtOH. XIII sensitizes a Ag bromiodide emulsion to 585 m.mu., max. at 535 m.mu.. VIII.EtI 2.06 and 2-methylmercaptobenzothiazole-MeI 1.61 g. are dissolved in dry pyridine 10, the soln. refluxed 0.5 hr., piperidine 10 cc. added, and the mixt. heated 10 min. and cooled. The ppt. is **recovered** and recrystd. from EtOH. XIV sensitizes a Ag bromiodide emulsion to 590 m.mu., max. at 540 m.mu.. III.EtI 3.65 and 2-[2-(N-acetylanilino)vinyl]benzothiazole-Et 3.04 g. are refluxed in 15 cc. dry pyridine 40 min., EtOH added to the cooled mixt., and, after standing, the dye crystals filtered and recrystd. from EtOH. XV sensitizes a Ag bromiodide emulsion to 640 m.mu., max. at 610 m.mu.. III.EtI 0.45, 2-(2-ethyl-2-methylmercaptovinyl)-6-methoxybenzothiazole-Et 0.39 g., iso-PrOH 15, and Et3N 0.2 cc. are refluxed 1 hr. Upon cooling, the dye ppts. and XVI is filtered and recrystd. from EtOH. XVI sensitizes a Ag bromiodide emulsion to 700 m.mu., max. at 640 m.mu.. IV.EtI 3.79, 2-(4-ethoxy-1,3-butadienyl)benzothiazole-EtI 3.92 g., and dry pyridine 15 cc. are refluxed 50 min., EtOH added to the cooled mixt., and, after standing, the dye crystals are filtered and recrystd. from EtOH. XVII sensitizes a Ag bromiodide emulsion of 760 m.mu., max. at 720 m.mu.. When 4.17 g. 2-(4-anilino-3-ethyl-1,3-butadienyl)benzoxazole-EtI was substituted for the benzothiazole compd., XVIII, sensitizing a Ag bromiodide emulsion to 720 m.mu., with a max. at 680 m.mu., was obtained. IX.EtI 3.79 and 2-(6-anilino-1,3,5-hexatrienyl)thiazoline-MeI 3.97 g. are mixed in 8 cc. dry pyridine, the mixt. refluxed 40 min., then chilled, and the dye crystals filtered and recrystd. from MeOH. XIX sensitizes a Ag bromiodide emulsion to 760 m.mu., max. at 720 m.mu.. VI.EtI 3.17, 2-(6-anilino-4-ethyl-1,3,5-hexatrienyl)benzothiazole-EtI 4.48 g., and dry pyridine 12 cc. are refluxed 1 hr., EtOH added to the cooled mixt., and, upon standing, the dye crystals are filtered and recrystd. from EtOH. XX sensitizes a Ag bromiodide emulsion to 800 m.mu., max. at 760 m.mu.. When 3.30 g. VII.Et was substituted for VI.EtI, XXI, sensitizing a Ag bromiodide emulsion to 790 m.mu., with a max. at 750 m.mu., was obtained. In the prepn. of photographic gelatino-Ag-developing-out emulsions, e.g., gelatino-AgCl, **contg.** mono- and polymethine dyes, it is only necessary to disperse the dyes in the emulsions. Compds. can be added from solns. in appropriate solvents, e.g., MeOH or EtOH, for the dyes. Emulsions are coated in the usual manner on a support such as cellulose nitrate, glass, paper, etc. Conc'n. of the dyes in the emulsion can vary



from 5 to 100 mg./l. of flowable emulsions according to the type of light-sensitive material in the emulsion and to the desired effect. These dyes can be used in the manuf. of light filters, antihalation **coatings**, and in the **coloring** of cellulose acetate yarn (silk). This is due to the increased H<sub>2</sub>O soly. imparted to the dyes by the presence of the 1,3,4-triazaindolizine nucleus. These new mono- and polymethine 1,3,4-triazaindolizine cyanines and their use as sensitizing dyes may have numerous variations and **modifications**, e.g., by condensing a quaternary salt of a 1,3,4-triazaindolizine with a dialkylaminobenzene in the presence of a basic condensing agent, e.g., piperidine, styryl dyes are obtained. Cf. C.A. 42, 4078d.

=&gt; d que stat l11

L1 274531 SEA FILE=HCAPLUS ABB=ON (?DEVICE? OR ?CLOSURE? OR ?RECEPTACLE?  
OR ?CONTAIN?) AND (?COLLECT? OR ?RECOVER? OR ?AMASS?)

L3 4651 SEA FILE=HCAPLUS ABB=ON L1 AND (?SEAL? OR ?PREVENT?(W)?LEAK?)

L5 2 SEA FILE=HCAPLUS ABB=ON L3 AND (?COLOR? OR ?OPAQUE?) (3A)?COAT?  
AND (?PEEL? OR ?REMOV?)

L6 3 SEA FILE=HCAPLUS ABB=ON L3 AND (?COLOR? OR ?OPAQUE?) (3A)?COAT?  
AND (?CHANGE? OR ?MODIF? OR ?ALTER?)

L7 4 SEA FILE=HCAPLUS ABB=ON L5 OR L6

L10 7 SEA L7

L11 7 DUP REMOV L10 (0 DUPLICATES REMOVED)

=&gt; d ibib abs l11 1-7

L11 ANSWER 1 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-642240 [69] WPIDS

CROSS REFERENCE: 1999-356818 [30]; 2002-114599 [15]; 2002-642155 [69];  
2002-642239 [69]

DOC. NO. CPI: C2002-181380

TITLE: Differentiating between allergic rhinitis (AR), upper  
respiratory tract viral infection (URI), bacterial  
sinusitis (BS), based on pH, protein, levels of nitrite,  
leukocyte esterase, TAME esterase, eosinophil count in  
nasal secretion.

DERWENT CLASS: B04 D16

INVENTOR(S): HUANG, S; KUDLA, R; SMALL, P

PATENT ASSIGNEE(S): (HUA-I) HUANG S; (KUDL-I) KUDLA R; (SMAL-I) SMALL P

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002086287	A1	20020704	(200269)*		17

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002086287	A1	CIP of	US 1995-576604 19951221
		CIP of	US 1996-621557 19960325
		CIP of	WO 1999-US5751 19990316
		Div ex	US 2000-597360 20000619
			US 2001-15521 20011213
		CIP of	US 2002-936954 20020124

PRIORITY APPLN. INFO: US 2002-936954 20020124; US 1995-576604  
19951221; US 1996-621557 19960325; WO  
1999-US5751 19990316; US 2000-597360  
20000619; US 2001-15521 20011213

AN 2002-642240 [69] WPIDS

CR 1999-356818 [30]; 2002-114599 [15]; 2002-642155 [69]; 2002-642239 [69]

AB US2002086287 A UPAB: 20021026

NOVELTY - Differentiating (M1) AR, URI and BS, by depositing patient's  
nasal secretion into **collection** apparatus for contact with  
reagents indicating pH, protein, nitrite, leukocyte esterase (LE),  
eosinophil or TAME esterase (TE) concentrations; differentiating AR, URI,  
BS based on pH, protein content, nitrite concentration, LE or TE activity  
or eosinophil counts, is new.

DETAILED DESCRIPTION - (M1) comprises measuring a sample of patient's nasal secretion for pH, protein concentration, nitrite concentration, leukocyte esterase activity, and eosinophil counts or TAME esterase activity or both, such that a scoring system is developed through a combination of:

(a) a pH between about 7.5 and 9, a moderately strong presence of protein, nitrite or leukocyte esterase, and low or absent eosinophil counts or TAME esterase activity is indicative of bacterial sinusitis without an allergic condition; and

(b) a pH between about 5 and 7, little or no protein, little or no nitrite, little or no leukocyte esterase activity, and moderate to significant TAME esterase activity or moderate to high eosinophil counts is indicative of allergic rhinitis, and a pH between about 5 and 7, little or no protein, low concentration or a trace of nitrite or a trace of leukocyte esterase or both, and low or absent eosinophil counts or low or absent TAME esterase activity indicates an upper respiratory tract infection, where the method comprises deposition by a patient of a nasal secretion sample within a **collection** apparatus adapted for receipt of the sample for concurrent or subsequent contact with reagents indicative of the pH, protein, nitrite, leukocyte esterase, eosinophil or TAME esterase concentrations.

INDEPENDENT CLAIMS are also included for:

(1) a **device** (I) for differentiating between AR, URI, and BS comprises a support upon which is fixed discrete indicator of pH, protein content, nitrite content, leukocyte esterase activity, and eosinophil content or TAME esterase or both, of a sample with which the fixed discrete indicators are contacted, where the support further comprises a unit for **collecting** the nasal secretion while minimizing contact of the nasal secretion with personnel using the **collection device**;

(2) a **device** (a nasal secretion **collection device**) (II) for **collecting** nasal secretions comprising a **sealable container** into which a patient may blow their nose, or into which a child's nose may be wiped or squeezed to obtain nasal secretion, where the **container** comprises a series of holes disposed so as to permit air blown into the **container** to escape, without at the same time permitting the nasal secretion to escape; and

(3) a kit for differential diagnosis of BS, AR and URI, comprises an unit for **collecting** a patient's nasal secretions within a **container**; and an unit for providing a differential readout upon contact with the nasal secretion, depending on whether the patient is afflicted with BS, URI or AR.

USE - (M1) is useful for differentiating between allergic rhinitis, upper respiratory tract viral infection, and bacterial sinusitis. (I) is useful for differential diagnosis of BS, AR and URI which involves **collecting** of patient's nasal secretion within a **container** and contacting the nasal secretions in the **container** with reagents that provide differential readout depending on whether the patient is afflicted with BS, URI or AR. Preferably AR is confirmed by means of contacting the nasal secretions with a reagent that provides a detective signal if TE or eosinophils are present in the secretion (claimed).

ADVANTAGE - (M1) can be carried out rapidly, is non-invasive and economical. (M1) has the potential to supplant much more expensive and invasive clinical procedures. (I) provides safe and simple differential diagnosis between BS, URI and AR. (II) provides a practical, simple and safe **collection device** for **collection** of nasal secretion. The **collection device** is adapted for home or point of use care for the **collection** of nasal secretions

and for the conducting diagnosis without the need for end-user contact with nasal secretion samples.

Dwg.0/3

L11 ANSWER 2 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 ACCESSION NUMBER: 2002-642239 [69] WPIDS  
 CROSS REFERENCE: 1999-356818 [30]; 2002-114599 [15]; 2002-642155 [69];  
 2002-642240 [69]  
 DOC. NO. CPI: C2002-181379  
 TITLE: Differentiating between allergic rhinitis (AR), upper  
 respiratory tract viral infection (URI), bacterial  
 sinusitis (BS), based on pH, protein, nitrite levels,  
 leukocyte esterase (LE), TAME esterase (TE), eosinophil  
 count in nasal secretion.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): HUANG, S; KUDLA, R; SMALL, P  
 PATENT ASSIGNEE(S): (HUAN-I) HUANG S; (KUDL-I) KUDLA R; (SMAL-I) SMALL P  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002086286	A1	20020704	(200269)*		17

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002086286	A1	CIP of	US 1995-576604 19951221
		CIP of	US 1996-621557 19960325
		CIP of	WO 1999-US5751 19990316
		Div ex	US 2000-597360 20000619
			US 2001-15509 20011213
		CIP of	US 2002-936954 20020124

PRIORITY APPLN. INFO: US 2002-936954 20020124; US 1995-576604  
 19951221; US 1996-621557 19960325; WO  
 1999-US5751 19990316; US 2000-597360  
 20000619; US 2001-15509 20011213

AN 2002-642239 [69] WPIDS  
 CR 1999-356818 [30]; 2002-114599 [15]; 2002-642155 [69]; 2002-642240 [69]  
 AB US2002086286 A UPAB: 20021026

NOVELTY - Differentiating (M1) AR, URI and BS comprising depositing patient's nasal secretion into **collection** apparatus for contact with reagents indicating pH, protein, nitrite, LE, eosinophil or TE concentrations; differentiating AR, URI, BS based on pH, protein content, nitrite concentration, LE or TE activity or eosinophil counts, is new.

DETAILED DESCRIPTION - Differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis, which comprises measuring a sample of patient's nasal secretion for pH, protein concentration, nitrite concentration, leukocyte esterase activity, and eosinophil counts or TAME esterase activity or both, such that a scoring system is developed through a combination of:

(a) a pH between about 7.5 and 9, a moderately strong presence of protein, nitrite or leukocyte esterase, and low or absent eosinophil counts or TAME esterase activity is indicative of bacterial sinusitis without an allergic condition; and

(b) a pH between about 5 and 7, little or no protein, little or no nitrite, little or no leukocyte esterase activity, and moderate to

significant TAME esterase activity or moderate to high eosinophil counts is indicative of allergic rhinitis, and a pH between about 5 and 7, little or no protein, low concentration or a trace of nitrite or a trace of leukocyte esterase or both, and low or absent eosinophil counts or low or absent TAME esterase activity indicates an upper respiratory tract infection, where the method comprises deposition by a patient of a nasal secretion sample within a **collection** apparatus adapted for receipt of the sample for concurrent or subsequent contact with reagents indicative of the pH, protein, nitrite, leukocyte esterase, eosinophil or TAME esterase concentrations.

INDEPENDENT CLAIMS are also included for:

(1) a **device** (I) for differentiating between AR, URI, and BS comprises a support upon which is fixed discrete indicator of pH, protein content, nitrite content, leukocyte esterase activity, and eosinophil content or TAME esterase or both, of a sample with which the fixed discrete indicators are contacted, where the support further comprises a unit for **collecting** the nasal secretion while minimizing contact of the nasal secretion with personnel using the **collection device**;

(2) a **device** (a nasal secretion **collection device**) (II) for **collecting** nasal secretions comprising a **sealable container** into which a patient may blow their nose, or into which a child's nose may be wiped or squeezed to obtain nasal secretion, where the **container** comprises a series of holes disposed so as to permit air blown into the **container** to escape, without at the same time permitting the nasal secretion to escape; and

(3) a kit for differential diagnosis of BS, AR and URI, comprises an unit for **collecting** a patient's nasal secretions within a **container** and an unit for providing a differential readout upon contact with the nasal secretion, depending on whether the patient is afflicted with BS, URI or AR.

USE - For differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis. (I) is useful for differential diagnosis of BS, AR and URI which involves **collecting** of patient's nasal secretion within a **container** and contacting the nasal secretions in the **container** with reagents that provide differential readout depending on whether the patient is afflicted with BS, URI or AR. Preferably AR is confirmed by means of contacting the nasal secretions with a reagent that provides a detective signal if TE or eosinophils are present in the secretion (claimed).

ADVANTAGE - (M1) can be carried out rapidly, is non-invasive and economical. (M1) has the potential to supplant much more expensive and invasive clinical procedures. (I) provides safe and simple differential diagnosis between BS, URI and AR. (II) provides a practical, simple and safe **collection device** for **collection** of nasal secretion. The **collection device** is adapted for home or point of use care for the **collection** of nasal secretions and for the conducting diagnosis without the need for end-user contact with nasal secretion samples.

DESCRIPTION OF DRAWING(S) - The figure shows the different chemical readouts obtained by contacting reagent test strips with the nasal secretions of multiple patients presenting with respiratory discomfort.  
Dwg.1/3

L11 ANSWER 3 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
ACCESSION NUMBER: 2002-642155 [69] WPIDS  
CROSS REFERENCE: 1999-356818 [30]; 2002-114599 [15]; 2002-642239 [69];  
2002-642240 [69]

DOC. NO. CPI: C2002-181345  
 TITLE: **Device** and method useful for differential diagnosis of allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis comprises measuring a patients nasal secretion for e.g., pH, protein and nitrite concentration.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): HUANG, S; KUDLA, R; SMALL, P  
 PATENT ASSIGNEE(S): (HUA-I) HUANG S; (KUDL-I) KUDLA R; (SMAL-I) SMALL P  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002081575	A1	20020627	(200269)*		17

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002081575	A1	CIP of	US 1995-576604 19951221
		CIP of	US 1996-621557 19960325
		CIP of	WO 1999-US5751 19990316
		Div ex	US 2000-597360 20000619
			US 2001-15525 20011213
		CIP of	US 2002-936954 20020124

PRIORITY APPLN. INFO: US 2002-936954 20020124; US 1995-576604 19951221; US 1996-621557 19960325; WO 1999-US5751 19990316; US 2000-597360 20000619; US 2001-15525 20011213

AN 2002-642155 [69] WPIDS  
 CR 1999-356818 [30]; 2002-114599 [15]; 2002-642239 [69]; 2002-642240 [69]  
 AB US2002081575 A UPAB: 20021026

NOVELTY - Differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis, comprising measuring a sample of a patient's nasal secretion for pH, protein concentration, nitrite concentration, leukocyte esterase activity, and eosinophil counts or TAME esterase activity or both, and **device** for carrying out said method.

DETAILED DESCRIPTION - Method for differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis, comprising measuring a sample of a patient's nasal secretion for pH, protein concentration, nitrite concentration, leukocyte esterase activity, and eosinophil counts or TAME esterase activity or both, by deposition of a nasal secretion sample by a patient within a **collection** apparatus adapted for receipt of the sample for concurrent or subsequent contact with reagents indicative of the parameters mentioned, where a scoring system is developed through the combination of:

(a) a pH of 7.5-9, a moderately strong presence of protein, nitrite or leukocyte esterase, and low or absent eosinophil counts or TAME esterase activity is indicative of bacterial sinusitis without an allergic condition;

(b) a pH of 5-7, little or no protein, nitrite and leukocyte esterase activity, and moderate to significant TAME esterase activity or moderate to high eosinophil counts is indicative of allergic rhinitis; and

(c) a pH of 5-7, little or no protein, low concentration or a trace of nitrite or a trace of leukocyte esterase or both, and low or absent eosinophil counts or TAME esterase activity indicates an upper respiratory

tract viral infection. A **device** for differentiating between allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis comprises a support with fixed discrete indicators of pH, protein content, nitrite content, leukocyte esterase activity and eosinophil content or TAME esterase or both, of a sample where the fixed discrete indicators are contacted, and a means for **collecting** nasal secretion while minimizing contact of nasal secretion with the person using the **collection device**.

INDEPENDENT CLAIMS are also included for the following:

(1) a **device** for **collecting** nasal secretions comprising a **sealable container** to which patients may blow their nose, or to which a child's nose may be wiped or squeezed to obtain nasal secretion, where the **container** comprises a series of holes disposed to permit air blown into the **container** to escape without permitting the nasal secretion to escape;

(2) a method for differential diagnosis of bacterial sinusitis, allergic rhinitis and upper respiratory tract infections, comprising: (a) **collecting** a patient's nasal secretions within a **container**; and (b) contacting the nasal secretions in the **container** with reagents which provide differential read-out depending on whether the patient is afflicted with sinusitis, upper respiratory tract viral infection or allergic rhinitis; and

(3) a kit for differential diagnosis of bacterial sinusitis, allergic rhinitis and upper respiratory tract viral infection, comprising: (a) a means for **collecting** a patient's nasal secretions within a **container**; and (b) a means for providing a differential read-out upon contact with the nasal secretion, depending on whether the patient is afflicted with sinusitis, upper respiratory tract viral infection or allergic rhinitis.

USE - The method and **device** is useful for differential diagnosis of allergic rhinitis, upper respiratory tract viral infection and bacterial sinusitis in a nasal secretion (claimed).

ADVANTAGE - The invention provides a safe, simple, and self-contained **device** for the differential diagnosis of sinusitis, viral respiratory tract infection and allergic rhinitis. The method provides an inexpensive, non-invasive, and rapid method of distinguishing between allergies and infections.

DESCRIPTION OF DRAWING(S) - The figure depicts a graphic representation of the novel test kit and **collection** apparatus of the novel **device** with the illustration of the method of its use.  
Dwg.1/3

L11 ANSWER 4 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-577188 [62] WPIDS

CROSS REFERENCE: 2002-577187 [62]

DOC. NO. CPI: C2002-163479

TITLE: Frozen fruits or frozen fruit pieces, e.g., strawberries, useful for preparing pies comprises layer of coating powder.

DERWENT CLASS: D13

INVENTOR(S): STULENS, E

PATENT ASSIGNEE(S): (DIRA-N) DIRAFROST FFI NV

COUNTRY COUNT: 26

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1228703	A2	20020807	(200262)*	EN	6

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
RO SE SI TR

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1228703	A2	EP 2002-447020	20020206

PRIORITY APPLN. INFO: EP 2001-870019 20010206

AN 2002-577188 [62] WPIDS

CR 2002-577187 [62]

AB EP 1228703 A UPAB: 20020926

NOVELTY - Frozen fruits or frozen fruit pieces comprises coating layer of 0.05-5 wt.% coating powder which is able to avoid juice leaking from the fruits or fruit pieces.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for the preparation process of frozen fruits or frozen fruit pieces by loading a continuously agitating **sealed preparation container** with individually quick frozen fruits; de-aerating the continuously agitating **sealed preparation container**; dosing the coating powder on the fruits; mixing the fruits on the powder in order to obtain a homogeneous dispersion of the coating powder upon the surface of the fruits; and **recovering** the obtained fruits.

USE - The frozen fruits or fruit pieces, e.g., strawberries, are useful for the preparation of a food composition, especially pastry, e.g., pie (claimed).

ADVANTAGE - The fruit product of the invention, after thawing, has a low water expulsion and a taste and caloric value not influenced by high amounts of added sugar.

DESCRIPTION OF DRAWING(S) - The figure shows a flow chart of the preparation process of the invention.

Dwg.1/2

L11 ANSWER 5 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-577187 [62] WPIDS

CROSS REFERENCE: 2002-577188 [62]

DOC. NO. CPI: C2002-163478

TITLE: Frozen fruits or frozen fruit pieces, e.g., strawberries, useful for preparing pies comprises coating of powder layer.

DERWENT CLASS: D13

INVENTOR(S): STULENS, E

PATENT ASSIGNEE(S): (DIRA-N) DIRAFROST FFI NV

COUNTRY COUNT: 26

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1228702	A1	20020807	(200262)*	EN	9
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1228702	A1	EP 2001-870019	20010206

PRIORITY APPLN. INFO: EP 2001-870019 20010206



AN 2002-577187 [62] WPIDS  
 CR 2002-577188 [62]  
 AB EP 1228702 A UPAB: 20020926  
 NOVELTY - Frozen fruits or frozen fruit pieces comprises coating of powder layer which is able to avoid juice leaking from the fruits or fruit pieces.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for the preparation process of frozen fruits or frozen fruit pieces by loading a continuously agitating **sealed preparation container** with individually quick frozen fruits; dosing the coating powder on the fruits; mixing the fruits on the powder in order to obtain a homogeneous dispersion of the coating powder upon the surface of the fruits; and **recovering** the obtained fruits.

USE - The frozen fruits or fruit pieces, e.g., strawberries, are useful for the preparation of a food composition, especially pastry, e.g., pie (claimed).

ADVANTAGE - The frozen fruits and fruit pieces which are individually encapsulated with the coating of stabilizing powder layer do not leak after thawing.

DESCRIPTION OF DRAWING(S) - The figure shows a flow chart of the preparation process of the invention.  
 Dwg.1/2

L11 ANSWER 6 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2001-071155 [08] WPIDS  
 DOC. NO. NON-CPI: N2001-053835  
 DOC. NO. CPI: C2001-019937  
 TITLE: Graft-catheter system used for vascular implantation during hemodialysis, comprises coupled graft and catheter regions coated with polytetrafluoroethylene and catheter region further has outer polyurethane coating.  
 DERWENT CLASS: A96 B07 P34  
 INVENTOR(S): DIFIORE, A E  
 PATENT ASSIGNEE(S): (BRDC) BARD ACCESS SYSTEMS INC  
 COUNTRY COUNT: 94  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000076577	A1	20001221	(200108)*	EN	25
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000054940	A	20010102	(200121)		
EP 1185330	A1	20020313	(200225)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 2003501223	W	20030114	(200306)		28

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000076577	A1	WO 2000-US16623	20000615
AU 2000054940	A	AU 2000-54940	20000615
EP 1185330	A1	EP 2000-939933	20000615
		WO 2000-US16623	20000615

JP 2003501223 W

WO 2000-US16623 20000615

JP 2001-502907 20000615

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000054940	A Based on	WO 2000076577
EP 1185330	A1 Based on	WO 2000076577
JP 2003501223	W Based on	WO 2000076577

PRIORITY APPLN. INFO: US 1999-333637 19990615

AN 2001-071155 [08] WPIDS

AB WO 200076577 A UPAB: 20010207

NOVELTY - A graft-catheter **device** (10) comprises graft and catheter regions (12,14) having tubular walls (I,II), comprising polytetrafluoroethylene, and catheter region further has outer polyurethane coating (18). One end of graft region is coupled to blood vessel (BV) (A) and other end is coupled to catheter whose free end (22) is inserted into BV (B) and arranged downstream to point of entry into BV.

USE - For vascular implantation during hemodialysis, chemotherapy, frequent blood **collection** for various medical tests and frequent intravenous drug administration.

ADVANTAGE - The graft catheter **device** avoids skin infections as it is implanted subcutaneously and provides continuous blood flow, thereby preventing thrombosis and minimizing damages to vascular system, and avoiding venous anastomosis so as to prevent hyperplasia. As the free end of catheter is inserted into a vein downstream from the point of entry into the vein, complications such as neointimal hyperplasia and thrombosis are prevented. As exterior of the graft region is not coated, normal tissue in-growth can take place, thereby increasing the stability of graft catheter and assisting in anchoring the graft-catheter. The support **devices** provided to graft catheter provide rigidity and prevent excessive bending, kinking, crushing or twisting. The polyurethane coating provides stiffness to the graft and catheter regions. The presence of needle receiving ports enable to shorten the healing period. The **device** efficiently provides sub cutaneous connection between an artery and vein without penetrating deep into the skin with the help of needles.

DESCRIPTION OF DRAWING(S) - The figure shows a side sectional view of a graft catheter **device**.

Graft-catheter **device** 10

Graft section 12

Catheter section 14

Tapered region 16

Polyurethane outer coating 18

Transverse holes 20

Beveled end 22

Dwg.1/13

L11 ANSWER 7 OF 7 JAPIO (C) 2003 JPO on STN

ACCESSION NUMBER: 1982-134639 JAPIO

TITLE: PORTABLE-TYPE COOLER-HEATER

INVENTOR: ATAKE KATSUTO

PATENT ASSIGNEE(S): ATAKE KATSUTO

PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 57134639	A	19820819	Showa	F24F001-02

## APPLICATION INFORMATION

STN FORMAT: JP 1981-20542 19810213  
ORIGINAL: JP56020542 Showa  
PRIORITY APPLN. INFO.: JP 1981-20542 19810213  
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
Applications, Vol. 1982

AN 1982-134639 JAPIO

AB PURPOSE: To obtain an inexpensive and handy cooler-water by a method wherein a **container** with a latent heat accumulating medium **sealed** therein is moved between a heat-**collecting** place and a heat-radiating place.

CONSTITUTION: The latent accumulating medium 1 is **sealed** in a closed **container** 2 made of a material which has perfect impermeability to water, durability to slight deformation and a high thermal conductivity, and the surface 3 of the **container** 3 is **coated** with a black **colored** matting material. In addition, **removable**-type fins 4 for increasing the heat-radiating effect or a **removable**-type heat insulating material 5 for enhancing the heat-insulating effect is provided. The **device** is placed at a sunny place to accumulate heat, and thereafter it is used as a heater. On the other hand, when using the **device** for cooling, the detachable fins 4 are fitted to the **container** 2 to radiate heat and this assembly is used as a cooler.  
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